IONOSPHERIC DATA

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CENTRAL RADIO PROPAGATION LABORATORY
NATIONAL BUREAU OF STANDARDS
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TERMINOLOGY AND SCALING PRACTICES

The symbols and terminology used in this report are those adopted by the International Radio Propagation Conference, and given in detail on pages 24 to 26 of the report IRPL-C61, "Report of International Radio Propagation Conference," and in the section on "Terminology," in reports IRPL-F1, 2, 3, 4, 5.

In the past, ionospheric conditions were summarized on a monthly basis by using average or mean values, for each hour of the day, for each month. However, following the recommendations of the International Radio Propagation Conference, held in Washington 17 April to 5 May 1944, beginning with data for 1 Jan. 1945, median values were used by IRPL wherever possible. Thus, median values are given for Washington, for all stations reporting directly to the CRPL, for the Canadian stations, and for all others sending in detailed tabulations to the CRPL, from which medians can be computed.

Where averages are reported, they are, at any hour, the average for all the days during the month for which numerical data existed.

The monthly median values used here are the values equaled or exceeded on half the days of the month at the given hour. The following conventions are used in determining the medians for hours when no measured values are given because of equipment limitations and ionospheric irregularities. Symbols used are those given in the report referred to above, IRPL-C61.

a. For all ionospheric characteristics:
   Values missing because of A, B, C or F (see terminology referred to above) are omitted from the median count.

b. For critical frequencies and virtual heights:
   Values missing because of E are counted as equal to or less than the lower limit of the recorder.
   Values missing because of D are counted as equal to or greater than the upper limit of the recorder.
   Values missing because of G are counted:
      1. For $f^{o}F2$, as equal to or less than $f^{o}F1$.
      2. For $h'F2$, as equal to or greater than the median.
   Values missing for any other reason are omitted from the median count.

c. For muf factors (M-factors):
   Values missing because of G are counted as equal to or less than the median.
   Values missing for any other reason are omitted from the median count.

d. For sporadic E (Es):

Values of fEs missing because no Es reflections appeared, the equipment functioning normally otherwise, are counted as equal to or less than the median $f^{o}E$, or equal to or less than the lower frequency count of the recorder.

Values of fEs missing for any other reason, and values of hEs missing for any reason at all, are omitted from the median count.

Beginning with data for November 1945, doubtful monthly median values for ionospheric observations at Washington, D.C., are indicated by parentheses, in accordance with the practice already in use for doubtful hourly values. The following are the conventions used to determine whether or not a median value is doubtful:

1. If only four values or less are available, no median value is computed, the data being considered insufficient.

2. For the F2 layer, if only five to nine values are available, the median is considered doubtful. The E and F1 layers are so regular in their characteristics that, so long as there are at least five values, the median is not considered as doubtful.

3. For all layers, if more than half of the values used to compute the median are doubtful (either doubtful or interpolated), the median is considered doubtful.

It is expected that this practice will be of assistance in evaluating the monthly median Washington data.

The same conventions are used by the CRPL in computing the medians from tabulations of daily and hourly data for stations other than Washington, beginning with the tables in IRPL-F18.

"Extent of E" is defined as follows: the highest value of $f^{o}E$. This is usually Es, but may include cases of normal E which were difficult to distinguish from Es, owing to the absence of a definite cusp.

MONTHLY AVERAGE AND MEDIAN VALUES OF WORLD-WIDE IONOSPHERIC DATA

The ionospheric data given here in Tables 1 to 80 and Figs. 1 to 87 were assembled by the Central Radio Propagation Laboratory for analysis and correlation, incidental to CRPL predictions of radio propagation conditions. The data are median values unless otherwise indicated. The following are the sources of the data:

Australian Council for Scientific and Industrial Research, Radio Research Board, Australia:
- Brisbane, Australia
- Canberra, Australia
- Cape York, Australia
- Hobart, Tasmania
- Townsville, Australia

British Department of Scientific and Industrial Research (National Physical Laboratory):
- Slough, England
- Great Baddow, England
- Burghead, Scotland
- Capetown, Union of S. Africa
- Colombo, Ceylon
- Oslo, Norway
- Cairo, Egypt
- Falkland Is.
- Tromso, Norway

Canadian Radio Wave Propagation Committee:
- Churchill, Canada
- Ottawa, Canada
- St. John's, Newfoundland
- Prince Rupert, Canada
- Clyde, Baffin I.
- Swan River, Manitoba (Mobile unit)
- The Pas, Manitoba (Mobile unit)
- Gillam, Manitoba (Mobile unit)

New Zealand Radio Research Committee:
- Kermadec Is.
- Christchurch (Canterbury University College Observatory)
- Campbell I.
- Pitcairn I.
- Rarotonga I.

South African Council for Scientific and Industrial Research:
- Johannesburg, Union of S. Africa

Scientific Research Institute of Terrestrial Magnetism, Moscow, U.S.S.R.:
Bukhta Tikhaya, U.S.S.R.
Tomsk, U.S.S.R.
Sverdlovsk, U.S.S.R.
Moscow, U.S.S.R.
Leningrad, U.S.S.R.
Alma Ata, U.S.S.R.

Carnegie Institution of Washington (Department of Terrestrial Magnetism):
Huancayo, Peru
Watheroo, W. Australia

United States Army Signal Corps:
Leyte, Philippine Is.
Tokyo, Japan
Okinawa, I.

National Bureau of Standards (Central Radio Propagation Laboratory):
Washington, D. C.
San Francisco, California (Stanford University)
Baton Rouge, Louisiana (Louisiana State University)
San Juan, Puerto Rico (University of Puerto Rico)
Boston, Massachusetts (Harvard University)
Fairbanks, Alaska (University of Alaska, College, Alaska)
Palmyra I.
Adak, Alaska
Guam I.
Maui, Hawaii
Trinidad, British West Indies

All India Radio (Government of India), New Delhi, India:
Bombay, India
Delhi, India
Madras, India
Peshawar, India

Radio Wave Research Laboratories, Central Broadcasting Administration:
Chungking, China
Peiping, China

National Wuhan University:
Wuchang, China

The tables of "provisional data" give values (1) as reported either to the CRPL or other central laboratory by telephone or telegraph; or (2) which are reported in summary form by stations from which monthly ionospheric data for every day and every hour may normally be expected at a later date.

The tables and graphs of "final data" are correct for the values reported to the CRPL, but, because of variations in practice in the interpretation of records and scaling and manner of reporting of values, may at times give an erroneous conception of typical ionospheric characteristics at the station. Some of these errors are due to:

a. Differences in scaling records where spread echoes are present.

b. Omission of values where $f^{o}F2$ is less than or equal to $f^{o}F1$, leading to erroneously high values of monthly average or median values.

c. Omission of values where critical frequencies are less than the lower frequency limit of the recorder, also leading to erroneously high values of monthly average or median values.

These effects were discussed on pages 6 and 7 of the previous F-series reports, IRPL-F1, 2, 3, 4, and 5.

The dashed-line prediction curves of the graphs of ionospheric data are obtained from the predicted zero-muf contour charts of the CRPL-D series publications. Predictions for individual stations used to construct the charts may be more accurate than the values read from the chart since some smoothing of the contours is necessary to allow for the longitude effect within a zone.

Discrepancies between predicted and observed values are often ascribable to these effects.

IONOSPHERIC DATA FOR EVERY DAY AND HOUR AT WASHINGTON, D. C.

The data given in Tables 69 to 80 follow the scaling practices given in the report IRPL-C61, "Report of International Radio Propagation Conference," pages 36 to 39, and the median values are determined by the conventions given above under "Terminology and Scaling Practices".

IONOSPHERE DISTURBANCES

Table 81 presents ionosphere character figures for Washington, D.C., during August 1946, as determined by the criteria presented in the report IRPL-R5, "Criteria for Ionospheric Storminess," together with American magnetic K-figures which are usually covariant with them.

Table 82 lists for the stations whose locations are given the sudden ionosphere disturbances observed on the continuous field intensity recordings made at the Sterling Radio Propagation Laboratory during August 1946.

Table 83 lists for the stations whose locations are given the sudden ionosphere disturbances observed at the Brentwood and Somerton, England receiving stations of Cable and Wireless Ltd. during July and August 1946.

Table 84 gives provisional radio propagation quality figures for North Atlantic and North Pacific areas, for 01 to 12 and 13 to 24 GCT, July 1946, compared with the CRPL daily radio disturbance warnings, which are primarily for the North Atlantic paths, the CRPL weekly radio propagation forecasts of probable disturbed periods, and the half-day American geomagnetic K-figures.

The radio propagation quality figures for the North Atlantic were prepared from radio traffic and ionospheric data reported to the CRPL, in the manner described in detail in report IRPL-R31, "North Atlantic Radio Propagation Disturbances October 1943 through October 1945," issued 1 Feb. 1946.

The radio propagation quality figures for the North Pacific were prepared from radio traffic and ionospheric data reported to the CRPL, in a manner similar to that of IRPL-R31. The master scale of IRPL-R31 was used to formulate conversion scales for the North Pacific reports. Currently, beginning with CRPL-F23, issued July 1946, the North Pacific radio propagation quality figures reported are prepared from these revised conversion scales rather than, as hitherto, from the conversion scales of report IRPL-R13, "Ionospheric and Radio Propagation Disturbances, October 1943 through February 1945," issued 24 May 1945.

These radio propagation quality figures give a consensus of opinion of actual radio propagation conditions as reported by the half day over the two general areas. It should be borne in mind, however, that though the quality may be disturbed according to the CRPL scale, the cause of the disturbance is not necessarily known. There are many variables that must be considered. In addition to ionospheric storminess itself as the

cause, conditions may be reported as disturbed because of seasonal characteristics, such as are particularly evident in the pronounced day and night contrast over North Pacific paths during the winter months, or because of improper frequency usage for the path and time of day in question. Insofar as possible, frequency usage is included in rating the reports. Where the actual frequency usage is not shown in the report to the CRPL, it has been assumed that the report is made on the use of optimum working frequencies for the path and time of day in question. Since there is a possibility that all of the disturbance shown by the quality figures is not due to ionospheric storminess alone, care should be taken in using the quality figures in research correlations with solar, auroral, geomagnetic, or other data. Nevertheless, these quality figures do reflect a consensus of opinion of actual radio propagation conditions as found on any one half-day in either of the two general areas.

AMERICAN RELATIVE SUNSPOT NUMBERS

Table 85 presents the daily median values of relative sunspot numbers as reported by American observers. The reports have been reduced, by appropriate constants, approximately to the Zurich scale of relative sunspot numbers. The monthly relative sunspot number is the mean of the daily median values listed in the table. This method was devised by Mr. A. H. Shapley of DTM, CIW. Details will be found in "Popular Astronomy," Vol. 54, No. 7, pp. 351 to 358, Aug. 1946; title, American Observations of Relative Sunspot Numbers in 1945 for Application to Ionospheric Predictions - by A. H. Shapley.

ERRATA

1. CRPL-F24:
   Tables 18, 23, 24, 25, 27, and 28 should read median values, and not average values.

2. CRPL-F23:
   Tables 18, 20, 21, 22, and 24 should read median values, and not average values.

3. IRPL-F22:
   Table 15 should read median values, [illegible] average values.

4. CRPL-F24, Table 56 should read at hours indicated:

Time	f°F2	F2-M3000
0000	10.3	
0300		3.1
1000	9.9	
1400	10.8	
1500	11.2	
1600	11.3	
1700	11.7	2.5
1900	(11.3)	(2.5)
2000	10.2	(2.4)
2100	(9.5)	(2.6)
2200	(9.8)	
2300	10.0	(2.7)

Corresponding changes in the graphs of Figs. 45 and 46 of same issue should be visualized.

5. CRPL-F24, Table 64 should read at hours indicated:

Time	f°F2	F2-M3000
0000	11.4	3.0
0100	11.2	
0300	7.1	
0400	6.1	
0600	4.6	
0700	7.7	
1000	11.1	
1100	10.4	
1200	10.3	
1300	10.9	
1400	11.5	
1500	12.0	
1600	12.5	2.5
1700	13.0	
1900	11.6	2.5
2100	11.5	(2.4)
2200	12.4	2.8
2300	11.8	(2.8)

Corresponding changes in the graphs of Figs. 60 and 61 of same issue should be visualized.

6. In previous issues of the IRPL-F and CRPL-F series, values of F2-M3000 for Slough, England were computed from average values, and were not median values.

Table 1 (Provisional data)

Clyde, Baffin I. (70.5°N, 68.6°W) August 1946

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00		4.9						3.1
01		5.2						3.0
02		4.8						3.1
03		4.5						3.1
04		5.0						3.2
05		4.9						3.1
06		5.0						3.1
07		5.2						3.1
08		5.3						3.2
09		5.4						3.1
10		5.4						3.1
11		5.3						2.9
12		5.5						2.9
13		5.4						2.8
14		5.6						2.9
15		5.4						2.8
16		5.3						3.0
17		5.4						3.0
18		5.3						3.0
19		5.3						3.0
20		5.2						3.0
21		5.1						3.0
22		4.9						3.0
23		4.9						3.0

Time: 75.0°W.
Sweep: 2.0 Mc to 16.0 Mc in one minute.

Table 2 (Provisional data)

Fairbanks, Alaska (64.9°N, 147.8°W) August 1946

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00	310	4.6				1.0	3.6	2.7
01	300	4.4				1.1	3.3	2.6
02	310	4.5				1.3	3.3	2.6
03	310	4.5				1.7	3.0	2.6
04	320	4.9	300	3.2		1.8	3.3	2.6
05	350	5.4	270	3.6		2.2	3.3	2.6
06	390	5.8	250	4.0		2.5	3.3	2.6
07	360	6.2	240	4.2		2.8	3.4	2.7
08	370	6.4	240	4.5		3.0	3.5	2.6
09	370	6.8	230	4.6		3.2	3.6	2.6
10	380	6.6	230	4.8		3.3	3.5	2.7
11	390	6.7	230	4.8		3.3	4.0	2.7
12	390	6.6	230	4.9		3.3	3.7	2.6
13	410	6.6	230	4.9		3.3	3.4	2.6
14	370	6.6	230	4.8		3.2	3.3	2.7
15	380	6.3	230	4.6		3.1	3.3	2.7
16	340	6.2	240	4.4		2.9	3.3	2.7
17	270	6.2	250	4.3		2.7	3.2	2.7
18	260	6.4				2.3	3.2	2.8
19	260	6.0				2.0	3.2	2.9
20	270	5.8				1.8	3.0	2.9
21	270	5.4				1.5	3.1	2.8
22	270	5.0				1.1	3.2	2.8
23	280	4.5				1.0	3.5	2.7

Time: 150.0°W
Sweep: 16.0 Mc to 0.5 Mc in fifteen minutes.

Table 3 (Provisional data)

Churchill, Canada (58.8°N, 94.2°W) August 1946

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00		4.8						2.8
01		5.1						2.7
02		4.8						2.8
03		4.7						2.8
04		4.6						2.9
05		4.7						2.9
06		5.2						3.0
07		5.6						3.0
08		6.1						2.9
09		6.4						2.9
10		6.4						2.8
11		6.6						2.8
12		6.8						2.7
13		6.8						2.6
14		6.8						2.7
15		7.4						2.7
16		7.3						2.8
17		7.4						2.8
18		6.9						2.8
19		6.6						2.8
20		6.0						2.9
21		5.9						2.8
22		5.8						2.8
23		5.6						2.7

Time: 90.0°W.
Sweep: 2.0 Mc to 16.0 Mc in one minute.

Table 4 (Provisional data)

Prince Rupert, Canada (54.3°N, 130.3°W) August 1946

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00		4.5						3.0
01		4.1						3.0
02		3.8						2.9
03		3.4						3.0
04		3.3						3.0
05		3.7						3.0
06		4.7						3.0
07		5.4						3.0
08		6.0						3.0
09		6.2						2.8
10		6.8						2.9
11		7.2						2.9
12		7.4						2.8
13		6.9						2.9
14		6.8						2.9
15		6.9						2.9
16		6.5						3.0
17		6.7						3.0
18		6.4						3.1
19		6.5						3.2
20		6.2						3.2
21		6.1						3.1
22		5.9						3.2
23		5.1						3.1

Time: 120.0°W.
Sweep: Manual operation.

Table 5 (Provisional data)

Adak, Alaska (51.9°N, 176.6°W) August 1946

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00	280	5.4					4.2	2.8
01								
02								
03								
04								
05								
06	380	6.4	220	4.1		2.5	4.3	2.9
07	350	7.0	230	4.5		2.7	4.5	2.9
08	310	7.4	220	4.7		2.8	6.0	2.8
09	300	7.8	210	4.9		2.8	5.3	3.0
10	310	8.0	220	5.1		2.8	5.0	3.0
11								
12	310	8.1	200	5.1		2.9	5.2	3.0
13	310	7.6	220	5.3		3.0	4.7	3.1
14	300	7.6	220	5.1		2.8	5.1	3.1
15								
16								
17								
18	250	7.4					3.9	3.2
19	260	7.4					4.0	3.2
20	250	7.2					3.5	3.0
21	250	6.9					3.4	3.0
22	260	6.4					3.5	2.9
23	280	5.8					3.9	2.9

Time: 180.0°W.
Sweep: Manual operation.

Table 6 (Provisional data)

St. John's, Newfoundland (47.6°N, 52.7°W) August 1946

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00		6.3						3.1
01		5.8						3.2
02		5.6						3.1
03		5.2						3.2
04		4.5						3.2
05		4.3						3.3
06		5.3						3.5
07		6.1						3.5
08		6.6						3.5
09		6.9						3.3
10		6.4						3.3
11		6.6						3.2
12		6.5						3.2
13		6.9						3.2
14		7.0						3.2
15		7.2						3.2
16		7.2						3.2
17		7.4						3.3
18		7.6						3.3
19		7.8						3.3
20		7.6						3.3
21		7.1						3.2
22		6.9						3.2
23		6.6						3.2

Time: 52.5°W.
Sweep: Manual operation.

Table 7 (Provisional data)

Ottawa, Canada (45.5°N, 75.8°W) August 1946

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00		5.2						2.7
01		4.9						2.8
02		4.5						2.9
03		3.8						2.8
04		3.5						3.0
05		3.7						3.0
06		4.9						3.0
07		5.8						2.9
08		6.0						2.9
09		6.5						2.8
10		6.6						2.8
11		6.6						2.7
12		6.6						2.7
13		6.9						2.7
14		7.0						2.7
15		7.0						2.7
16		7.4						2.7
17		7.4						2.8
18		7.8						2.8
19		7.6						2.8
20		7.5						2.8
21		7.0						2.8
22		6.2						2.8
23		5.4						2.8

Time: 75.0°W.
Sweep: 1.93 Mc to 13.5 Mc. Manual operation.

Table 8 (Provisional data)

Boston, Massachusetts (42.4°N, 71.2°W) August 1946

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00		5.6						2.7
01		5.2						2.6
02		4.7						2.7
03		4.6						2.7
04		3.9						2.7
05		4.0						2.7
06		4.3						2.8
07		5.1						2.9
08		6.0						2.8
09		6.5						2.7
10		6.7						2.8
11		6.6						2.8
12		6.3						2.7
13		6.9						2.7
14		6.6						2.6
15		6.8						2.7
16		6.7						2.7
17		6.8						2.8
18		7.0						2.8
19		7.8						2.8
20		7.6						2.8
21		7.5						2.8
22		6.7						2.7
23		5.9						2.7

Time: 75.0°W.
Sweep: 0.85 Mc to 13.75 Mc in one minute.

Table 9 (Provisional data)

San Francisco, California (37.4°N, 122.2°W) August 1946

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00		5.3						2.6
01		5.1						2.6
02		5.0						2.7
03		4.8						2.7
04		4.8						2.7
05		4.4						2.8
06		5.8						3.0
07		7.1						3.0
08		7.7						2.8
09		8.2						2.7
10		8.4						2.8
11		8.5						2.8
12		8.4						2.8
13		8.7						2.8
14		8.5						2.8
15		8.4						2.9
16		8.2						2.9
17		7.8						3.0
18		7.8						3.0
19		7.2						3.1
20		7.1						2.9
21		6.3						2.9
22		5.8						2.8
23		5.4						2.6

Time: 120.0°W.
Sweep: 0.8 Mc to 12.0 Mc in six minutes. Record centered on the hour.

Table 10 (Provisional data)

Baton Rouge, Louisiana (30.5°N, 91.2°W) August 1946

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00		5.4						2.9
01		5.4						3.0
02		5.2						3.0
03		4.9						3.0
04		4.6						3.0
05		4.4						3.0
06		5.1						3.0
07		6.6						3.2
08		7.5						3.0
09		7.4						3.0
10		8.0						2.9
11		8.0						2.9
12		8.5						2.9
13		9.2						2.9
14		9.5						3.0
15		9.1						3.0
16		9.3						3.0
17		9.2						3.1
18		8.5						3.1
19		7.6						3.1
20		6.5						3.1
21		6.1						3.0
22		5.8						3.0
23		5.6						2.9

Time: 90.0 W.
Sweep: 1.9 Mc to 9.8 Mc in three minutes, thirty seconds.

Table 11 (Provisional data)

Maui, Hawaii (20.8°N, 156.5°W) August 1946

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00	300	8.5				3.4		
01	270	8.2				3.6		
02	250	8.2	300	7.3		3.4		
03	250	6.7				3.3		
04	250	6.5				3.3		
05	250	5.3				3.5		
06	260	6.3	200	7.8		3.4		
07	250	7.5	200	4.4		3.4		
08	290	8.0	250	4.6		3.6		
09	350	8.4	200	5.6		3.3		
10	400	9.8	220	5.6		3.4		
11	400	10.6	220	5.6		3.4		
12	400	11.6	210	5.6		3.4		
13	360	11.8	230	5.4		3.2		
14	350	12.4	250	5.3		3.3		
15	330	12.5	210	5.1		3.4		
16	300	12.4	250	4.9		3.6		
17	290	11.0	200	4.0		3.9		
18	250	11.9				3.6		
19	280	10.2				3.4		
20	300	10.3				3.4		
21	300	9.5				3.4		
22	300	9.4				3.4		
23	300	8.2				3.4		

Time: 150.0°W.
Sweep: 2.2 Mc to 16.0 Mc in one minute.

Table 12 (Provisional data)

Trinidad, Brit. West Indies (10.6°N, 61.2°W) August 1946

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00	270	9.3						3.0
01	250	8.8						3.0
02	250	8.4						3.1
03	250	8.0						3.0
04	240	7.0						3.1
05	240	6.2						3.1
06	260	6.5					2.2	3.1
07	230	7.4				2.5	3.0	3.3
08	250	8.1	220	4.6		3.2	3.6	3.1
09	300	8.9	220	5.4		3.6	4.0	2.9
10	320	10.2	220	5.6		3.9	4.4	2.7
11	340	11.3	220	5.6		4.0	4.6	2.7
12	340	12.0	220	5.7		4.2	4.6	2.7
13	340	12.3	220	5.6		4.1	4.5	2.7
14	330	12.7	220	5.5		4.0	5.0	2.8
15	320	12.8	220	5.4		3.8	5.3	2.8
16	310	12.5	230	5.3		3.4	5.0	2.8
17	280	12.0	220	4.4		2.8	4.8	2.8
18	260	10.1				2.1	4.0	2.8
19	270	10.8					3.3	2.8
20	270	11.0					3.0	2.8
21	260	11.2					2.6	2.8
22	270	10.4					1.8	2.8
23	260	10.1						2.8

Time: 60.0°W.
Sweep: Manual operation.

Table 13 (Provisional data)

Brisbane, Australia (27.5°S, 153.0°E) August 1946

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	F2-M3000
00		5.2						3.0
01		4.8						3.0
02		4.7						3.0
03		4.5						3.0
04		4.1						2.8
05		4.0						2.9
06		4.6						3.0
07		7.0						3.2
08		8.8						3.2
09		9.8						3.2
10		10.3						3.2
11		10.2						3.1
12		9.6						3.1
13		9.3						3.0
14		9.2						3.1
15		9.1						3.0
16		8.6						3.1
17		8.2						3.1
18		7.6						3.0
19		6.7						3.0
20		6.0						2.9
21		5.8						2.9
22		5.5						2.9
23		5.4						2.9

Time: Local.
Sweep: 2.2 Mc to 12.5 Mc in two minutes thirty seconds.

Table 14 (Provisional data)

Watheroo, W. Australia (30.3°S, 115.9°E) August 1946

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	F2-M3000
00		3.9						2.8
01		4.6						2.8
02		4.1						2.8
03		4.2						2.9
04		4.0						2.8
05		4.0						2.9
06		4.3						3.1
07		6.6						3.4
08		8.4						3.4
09		9.4						3.2
10		9.7						3.1
11		9.9						3.1
12		10.0						3.1
13		9.9						3.0
14		9.9						3.0
15		9.6						3.0
16		9.0						3.0
17		8.7						3.0
18		7.9						3.1
19		6.4						3.0
20		5.5						3.0
21		4.8						3.0
22		4.5						2.9
23		4.1						2.9

Time: Local.
Sweep: 16.0 Mc to 0.5 Mc in fifteen minutes.

Table 15 (Provisional data; supersedes Table 1, CRPL-F24)

Clyde, Baffin I. (70.5°N, 68.6°W) July 1946

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	F2-M3000
00	300	4.3						
01	300	4.5						
02	330	4.4						
03	340	4.4						
04	370	4.3						
05	445	4.2						
06	490	4.4						
07	460	4.6						
08	485	4.6						
09	(440)	(5.0)						
10	445	5.0					3.2	
11								
12	(470)	(4.8)						
13	(430)	(4.9)						
14	450	4.7						
15	480	4.9						
16	440	5.0					2.8	
17	445	4.7						
18	380	4.7						
19	390	4.6					2.8	
20	345	4.6						
21	310	4.5						
22	320	4.5						
23	300	4.4						

Time: 75.0°W.
Sweep: 2.0 Mc to 16.0 Mc in one minute.

Table 16 (Provisional data)

Okinawa I. (26.3°N, 127.8°E) July 1946

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	F2-M3000
00		8.4					4.4	2.6
01		8.3					4.6	2.7
02		7.8					4.5	2.8
03		6.9					3.6	2.7
04		6.3					3.2	2.7
05		6.0					3.2	2.7
06		6.5					3.8	3.0
07		7.4				3.6	5.0	3.2
08		7.5				3.1	5.3	3.0
09		7.6	5.3			3.5	5.3	3.0
10		7.9	5.5			3.8	5.4	2.7
11		8.8	5.5			4.0	5.8	2.6
12		9.9	5.6			4.0	5.8	2.5
13		10.8	5.5			4.0	5.8	2.7
14		10.7	5.5			4.0	5.5	2.6
15		10.9	5.5			3.8	5.7	2.7
16		11.1	5.2			3.6	5.1	2.8
17		11.4	5.0			3.3	5.5	2.8
18		11.0				2.8	5.3	2.9
19		9.7					4.7	2.9
20		8.8					4.6	2.6
21		8.4					4.0	2.6
22		8.4					3.5	2.6
23		8.4					4.0	2.6

Time: 135.0°E.

Table 17 (Provisional data)

Guam I. (13.5°N, 144.8°E) July 1946

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00	300	9.0					3.4	2.9
01	280	7.8					3.8	2.9
02	290	7.2					3.0	2.8
03	290	6.6					3.6	2.9
04	280	6.4					2.2	2.9
05	250	5.6					3.6	3.2
06	270	5.5					2.8	3.1
07	240	8.0					5.2	3.1
08	250	8.7	220				6.5	3.0
09	290	8.9	210	5.0			6.5	2.7
10	330	9.7	210	5.4			6.0	2.5
11	380	10.2	200	5.7			6.1	2.4
12	400	10.8	200	5.6		4.2	6.0	2.4
13	400	11.0	200	5.6			5.9	2.4
14	400	11.5	200	5.6			6.2	2.4
15	390	11.8	220	5.5			6.6	2.4
16	340	12.2	220	5.2			7.0	2.5
17	310	12.6	230	4.8			6.2	2.6
18	260	12.1					6.8	2.6
19	280	11.6					5.2	2.5
20	350	10.6					4.8	2.4
21	360	10.2					3.6	2.5
22	330	9.5					3.4	2.6
23	320	9.6					4.0	2.8

Time: 150.0°E.
Sweep: Manual operation.

Table 18 (Provisional data)

Leyte, Philippine Is. (11.0°N, 125.0°E) July 1946

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00		9.0					2.6	2.7
01		7.7					1.6	2.9
02		7.1					1.6	2.9
03		6.6					1.6	2.9
04		6.1					1.6	3.0
05		5.8					1.6	3.2
06		5.2					1.6	3.1
07		7.1				2.3	3.0	3.1
08		8.8				3.0	4.8	3.0
09		9.3				3.5	5.6	2.6
10		10.1				3.9	6.2	2.5
11		10.3		5.5		4.2	6.2	2.3
12		10.4		5.8		4.3	7.8	2.3
13		10.2		5.7		4.2	6.8	2.2
14		10.2		5.6		4.2	7.8	2.2
15		10.1		5.6		3.7	7.4	2.2
16		10.6		5.3		3.5	7.1	2.3
17		10.5		4.8		3.3	5.9	2.3
18		10.3				2.5	4.8	2.4
19		10.2					3.0	2.4
20		9.4					2.2	2.4
21		8.9					1.6	2.4
22		9.0					1.6	2.5
23		8.9					2.7	2.6

Time: 135.0°E.
Sweep: Manual operation.

Table 19 (Provisional data)

Johannesburg, S. Africa (26.2°S, 28.0°E) July 1946

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00		2.7						3.0
01		2.8						3.0
02		2.9						3.1
03		3.0						3.1
04		2.6						3.1
05		2.6						3.1
06		2.6						3.1
07		5.7						3.3
08		8.1						3.4
09		9.0						3.4
10		9.7						3.3
11		9.5						3.3
12		9.5						3.2
13		9.5						3.1
14		9.5						3.1
15		9.5						3.1
16		9.5						3.1
17		8.9						3.3
18		6.5						3.4
19		4.5						3.3
20		3.8						3.3
21		3.2						3.3
22		2.8						3.1
23		2.8						3.1

Time: 30.0°E.
Sweep: 2.0 Mc to 15.0 Mc in eight seconds.

Table 20 (Provisional data)

Hobart, Tasmania (42.8°S, 147.4°E) July 1946

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00		0.0						3.1
01		2.9						3.1
02		2.8						3.2
03		2.8						3.2
04		2.7						3.2
05		2.6						3.3
06		2.5						3.2
07		3.3						3.4
08		5.9						3.6
09		7.4						3.6
10		8.1						3.5
11		9.2						3.4
12		9.5						3.4
13		9.1						3.4
14		8.9						3.3
15		8.8						3.3
16		8.3						3.4
17		7.5						3.3
18		6.4						3.3
19		5.3						3.2
20		4.5						3.3
21		3.9						3.2
22		3.4						3.1
23		3.2						3.1

Time: 150.0°E.
Sweep: 1.0 Mc to 13.0 Mc in one minute, fifty-five seconds.

Table 21

Washington, D.C. (39.0°N, 77.5°W) August 1946

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00	280	5.6					2.9	2.8
01	280	5.3					2.6	2.8
02	270	4.9					2.6	2.8
03	270	4.5					2.4	2.8
04	275	4.0					2.4	2.8
05	275	4.0					2.7	2.8
06	250	5.2	250		110	(2.0	3.8	3.0
07	280	6.0	230	4.2	110	2.7	4.0	2.9
08	315	6.7	220	4.6	110	3.1	5.0	3.0
09	320	7.0	210	5.0	110	(3.5)	4.2	3.0
10	340	7.2	210	5.1	110	(3.7)	4.0	2.8
11	355	7.1	200	5.3	110	(3.8)	4.0	2.8
12	380	7.2	210	5.2	110	(3.8)	3.8	2.8
13	380	7.1	210	5.2	110	(3.8)	3.9	2.7
14	360	7.4	215	5.2	110	3.8	4.0	2.7
15	360	7.4	220	5.1	110	(3.6)	3.9	2.8
16	340	7.5	220	4.9	110	3.3	3.8	2.8
17	300	7.6	230	4.5	110	2.8	3.8	2.8
18	280	7.8	240		110	2.3	3.4	2.9
19	250	(7.8)			120		3.0	(3.0)
20	240	7.2					3.1	(2.8)
21	250	(6.7)					3.0	(2.8)
22	260	(6.0)					3.1	(2.8)
23	280	(5.6)					2.8	(2.8)

Time: 75.0°W.
Sweep: 0.75 Mc to 11.5 Mc in 3.4 minutes.

Table 22 (Supersedes Table 2, CRPL-F24)

Fairbanks, Alaska (64.9°N, 147.8°W) July 1946

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00	300	4.5				1.8	3.5	2.7
01	312	4.4					5.5	2.7
02	330	4.8					5.0	2.6
03	385	4.8				2.1	4.2	2.6
04	425	5.0	298	3.6		2.4	5.0	2.6
05	415	5.4	252	3.9		2.6	5.1	2.6
06	460	5.2	245	4.1		3.0	3.6	2.4
07	470	5.2	235	4.3		3.2	3.5	2.5
08	460	5.4	230	4.4		3.3	3.5	2.5
09	525	5.5	220	4.5		3.3	3.3	2.4
10	495	5.5	226	4.6		3.4	3.5	2.5
11	530	5.5	220	4.6		3.5	3.5	2.4
12	515	5.6	225	4.7		3.5	3.2	2.4
13	500	5.5	225	4.7		3.3	3.2	2.5
14	510	5.5	230	4.7		3.3	3.3	2.5
15	450	5.6	225	4.6		3.3	3.2	2.6
16	445	5.7	230	4.5		3.2	3.1	2.6
17	400	5.6	230	4.3		3.0	3.0	2.6
18	320	5.6	250	3.9		2.8	3.0	2.7
19	270	5.6	250	3.8		2.5	3.2	2.8
20	280	5.5				2.1	3.2	2.8
21	288	5.2				1.9	3.2	2.8
22	272	5.0				1.6	3.9	2.8
23	285	5.0				1.6	3.5	2.8

Time: 150.0°W.
Sweep: 16.0 Mc to 0.5 Mc in fifteen minutes.

Table 23 (Supersedes Table 3, CRPL-F24)

Churchill, Canada (58.8°N, 94.2°W) July 1946

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00	310	4.6					6.2	2.8
01	300	4.6					4.6	2.8
02	300	4.5					4.7	2.8
03	300	4.6					3.8	2.8
04	330	4.5	320	(3.3)	130	2.8	3.7	2.8
05	385	4.6	265	3.4	140	2.8	3.5	2.7
06	340	5.0	245	3.9	130	2.9	3.4	2.6
07	465	5.0	240	4.3	130	3.5	3.4	2.8
08	550	5.0	235	4.6	120	3.5	3.4	2.4
09	460	5.4	245	4.6	125	3.6		2.6
10	470	5.5	250	4.8	120	3.8		2.6
11	480	5.6	250	4.8	120	3.6		2.6
12	440	6.0	240	5.0	120	3.6		2.6
13	425	6.2	230	4.9	120	3.5		2.6
14	430	6.2	230	4.8	120	3.6		2.6
15	420	6.1	240	4.8	120	3.5		2.7
16	410	6.2	230	4.6	120	3.4		2.7
17	380	6.2	230	4.5	120	3.3		2.8
18	350	6.1	240	4.4	130	3.2		2.8
19	340	5.8	265	3.9	130	3.1		2.8
20	320	5.5	290	3.3	130	3.0		2.8
21	320	5.0			145	3.2	2.9	2.8
22	320	4.9					5.6	2.7
23	320	5.0					7.0	2.8

Time: 90.0°W.
Sweep: 2.0 Mc to 16.0 Mc in one minute.

Table 24 (Supersedes Table 4, CRPL-F24)

Prince Rupert, Canada (54.3°N, 130.3°W) July 1946

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00	245	4.2					3.0	3.1
01	260	3.5					3.0	3.0
02	260	3.5					3.6	3.0
03	270	3.2					3.7	3.0
04	270	3.2					3.4	3.0
05	330	4.1	240	3.2	105	1.8	2.6	2.8
06	380	4.8	210	3.7	90	2.3	2.6	2.8
07	390	5.2	200	4.0	90	2.6	3.7	2.8
08	415	5.2	190	4.2	80	2.9	3.9	2.7
09	430	5.5	180	4.4	80	3.2	3.7	2.7
10	470	5.6	170	4.6	80	3.4	3.9	2.6
11	410	5.8	170	4.8	80	3.5	3.8	2.8
12	420	5.8	180	4.8	80	3.6	3.9	2.8
13	420	5.7	180	4.9	80	3.6	3.9	2.7
14	430	5.7	180	4.9	80	3.5	3.8	2.7
15	410	5.8	180	4.9	80	3.5	3.8	2.8
16	400	5.8	180	4.7	80	3.4	4.0	2.8
17	370	5.8	190	4.6	80	3.2	3.5	2.9
18	320	5.8	190	4.3	80	2.9	3.4	3.0
19	280	6.0	200	4.0	90	2.6	3.0	3.1
20	240	5.9	210	3.4	90	2.1	2.9	3.2
21	220	5.7				1.7	3.4	3.2
22	220	5.2						3.1
23	225	4.9					3.8	3.1

Time: 120.0°W.
Sweep: Manual operation.

Table 25

The Pas, Manitoba (54.0°N, 101.0°W) July 1946

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00	300	4.3					5.9	(2.6)
01	330	3.6					5.0	(2.5)
02	355	4.1					5.2	(2.4)
03	350	4.6					4.4	(2.4)
04	330	4.4					4.4	(2.5)
05	350	4.2					3.0	(2.6)
06	380	4.8	260	3.7			4.4	(2.3)
07	420	4.8	235	4.0	110	2.9		2.5
08	450	5.0	215	4.3	100	3.2		2.4
09	490	5.2	210	4.4	100	3.3		2.3
10	500	5.2	200	4.6	100	3.3		2.4
11	520	5.3	200	4.6	100	3.5		2.3
12	470	5.5	205	4.7	100	3.4		2.3
13	475	5.4	215	4.8	100	3.5		2.4
14	485	5.8	210	4.8	100	3.4		2.3
15	430	5.7	200	4.6	100	3.4		2.3
16	430	5.6	210	4.6	100	3.4		2.4
17	390	5.0	215	4.6	110	3.2		2.5
18	360	5.6	215	4.3	100	2.9		2.5
19	315	6.0	240	4.0	110	2.6		2.6
20	260	6.0			120	2.4		2.7
21	250	5.5			115	2.0	2.4	2.6
22	270	4.8					2.5	2.7
23	275	4.8			110	2.6	2.8	2.7

Time: 90.0°W.
Sweep: 1.2 Mc to 16.0 Mc in approximately two minutes.

Table 26 (Supersedes Table 5, CRPL-F24)

Adak, Alaska (51.9°N, 176.6°W) July 1946

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00	280	5.5						2.7
01								
02								
03								
04								
05								
06	420	5.8	250	4.3		2.9	4.5	2.6
07	370	(6.5)		(4.5)		2.8	5.6	2.5
08	(415)	6.1	225	4.5		3.0	5.4	2.7
09	(412)	(6.3)	210	4.9		2.9	5.0	2.5
10	410	6.5	210	5.0		3.2	5.0	2.7
11	385	(5.6)					(5.0)	2.9
12	390	6.6	195	5.1		3.3	6.1	2.7
13	425	6.4	200	5.0		3.2	5.0	2.7
14	405	6.1	200	5.0			4.1	2.7
15	438	(5.9)	208	4.9		3.2	4.6	2.8
16	372	6.0	230	4.8			5.9	2.9
17	340	(5.8)	240			3.1	(4.1)	3.0
18	290	6.1				2.7	4.5	3.0
19	278	6.4					4.4	3.0
20	262	6.4					5.0	3.0
21	270	6.8					4.0	2.8
22	268	6.4					2.6	2.8
23	290	6.0					2.3	2.7

Time: 180.0°W.
Sweep: Manual operation.

Table 27 (Supersedes Table 6, CRPL-F24)

St. John's, Newfoundland (47.6°N, 52.7°W) July 1946

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00	260	5.9					3.4	3.0
01	260	5.9					3.3	(3.1)
02	240	5.3					3.4	(3.1)
03	250	4.8					3.0	(3.1)
04	260	4.4					2.8	(3.2)
05	230	4.3					2.8	3.2
06	250	5.0	220	3.9	95	2.4	3.9	3.3
07	270	5.1	200	4.0	100	2.8	3.8	3.2
08	300	5.7	200	4.6	90	3.0	4.1	3.0
09	310	5.8	190	4.7	90	3.2	3.9	3.2
10	320	6.0	190	4.9	90	3.5	3.7	3.1
11	330	6.2	190	5.0	90	3.6	4.0	3.0
12	370	6.1	180	5.1	90	3.6	4.1	3.0
13	355	6.1	190	5.1	90	3.6	4.6	3.0
14	330	6.0	190	5.0	90	3.6		3.0
15	320	6.4	190	5.0	90	3.5	3.8	3.0
16	320	6.7	190	4.8	90	3.2	3.4	3.0
17	310	6.8	200	4.6	90	3.0		3.1
18	270	6.8	210	4.2	100	2.7	2.7	3.1
19	260	7.0	210	3.6	100	2.4	3.1	3.2
20	240	7.0					2.7	3.1
21	240	6.8					2.5	3.0
22	250	6.6					2.4	3.0
23	255	6.6					3.2	3.1

Time: 52.5°W.
Sweep: Manual operation.

Table 28 (Supersedes Table 7, CRPL-F24)

Ottawa, Canada (45.5°N, 75.8°W) July 1946

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00	300	5.0					3.6	2.9
01	300	4.7						2.9
02	320	3.9						3.0
03	310	3.6						3.0
04	320	3.3						3.0
05	270	3.8						3.0
06	270	4.6	230	4.0	120	2.8		3.0
07	305	4.8	220	4.2	120	3.0		2.9
08	375	5.7	210	4.6	110	3.2		2.7
09	400	5.9	210	4.9	110	3.6		2.7
10	420	6.0	200	5.0	110	3.5		2.7
11	420	6.1	200	5.1	110	3.7		2.7
12	495	5.8	200	5.2	110	3.8		2.4
13	470	6.0	205	5.1	110	3.8		2.5
14	420	6.4	210	5.0	110	3.6		2.6
15	400	6.3	210	5.0	110	3.6		2.6
16	370	6.2	210	4.9	110	3.4		2.6
17	360	6.5	220	4.7	120	3.2		2.7
18	310	6.9	230	4.3	120	2.9		2.7
19	260	6.9	265	3.7	120	2.9		2.8
20	260	7.1						2.8
21	265	6.9						2.8
22	270	6.4					3.3	2.8
23	295	5.0						2.8

Time: 75.0°W.
Sweep: 1.93 Mc to 13.5 Mc. Manual operation.

Table 29 (Supersedes Table 8, CRPL-F24)

Boston, Massachusetts (42.4°N, 71.2°W) July 1946

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00	300	6.1						2.7
01	300	5.4						2.6
02	300	4.9						2.7
03	295	4.6						2.7
04	290	4.6						2.7
05	275	4.3						2.8
06	300	4.6						2.8
07	300	5.1			125	1.9		2.8
08	300	5.6	250	4.2	140	2.7		2.8
09	350	6.0	255	4.5				2.8
10	378	6.5	250	4.7				2.8
11	420	6.6	245	4.8				2.8
12	(450)	(6.5)						2.5
13	-400	6.6						2.7
14	(450)	(6.7)						2.6
15	(450)	(6.5)						2.6
16	400	6.8	260	4.9				2.6
17	400	6.5	275	4.7				2.6
18	350	6.8	350	4.9				2.7
19	318	6.6						2.7
20	300	6.7						2.7
21	280	6.6						2.7
22	292	6.7						2.7
23	298	6.5						2.6

Time: 75.0°W.
Sweep: 0.85 Mc to 13.75 Mc in one minute.

Table 30 (Supersedes Table 9, CRPL-F24)

San Francisco, California (37.4°N, 122.2°W) July 1946

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00	300	5.0					3.3	2.6
01	300	4.9					3.2	2.6
02	300	4.8					2.8	2.6
03	300	4.4					3.1	2.6
04	300	(4.1)					2.8	2.6
05	295	4.0					2.6	2.7
06	370	4.9	250	3.8	120	2.4	3.2	2.7
07	400	5.8	220	4.3	100	3.0	3.6	2.6
08	400	6.3	220	4.8	100	3.3	4.0	2.7
09	360	7.0	200	4.9	100	3.6	4.2	2.7
10	380	7.4	200	5.1	100	3.8		2.8
11	380	7.6	200	5.2	100	3.8		2.7
12	370	8.0	200	5.3	100	3.8		2.8
13	360	7.8	200	5.3	100	3.8		2.8
14	360	7.6	210	5.2	100	3.8		2.8
15	345	7.5	220	5.0	100	3.7		2.8
16	345	7.4	220	4.9	100	3.6		2.9
17	320	7.3	220	4.6	100	3.2	3.8	2.9
18	280	7.2	240	4.0	100	2.7	3.4	3.0
19	250	6.8					2.9	3.0
20	240	7.0					3.3	3.0
21	240	6.2					3.3	2.8
22	260	5.5					2.8	2.8
23	280	5.0					3.1	2.6

Time: 120.0°W.
Sweep: 0.8 Mc to 12.0 Mc in six minutes. Record centered on the hour.

Table 31

Tokyo, Japan (35.6°N, 139.6°E) July 1946

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00	275	7.5					4.0	2.9
01	260	7.4					3.4	3.0
02	250	7.2					3.8	3.0
03	260	6.4					3.2	3.0
04	270	6.2					2.8	3.0
05	250	6.4	240			1.8	3.0	3.0
06	240	7.6	210		105	2.5	4.2	3.1
07	270	7.6	210	4.6	100	3.0	5.1	3.2
08	260	7.8	200	5.0	100	3.4	5.2	3.3
09	300	7.7	190	5.3	100	3.6	6.1	3.1
10	300	7.9	200	5.2	100	3.8	5.2	3.1
11	320	8.2	200	5.6	100	3.8	6.4	3.0
12	320	8.5	250	5.4	100	3.8	7.9	3.0
13	310	8.8	220	5.4	100	3.9	6.8	3.0
14	310	8.8	215	5.4	100	3.7	5.6	3.1
15	300	8.5	220	5.2	100	3.8	5.6	3.2
16	300	8.1	210	4.9	100	3.5	5.4	3.1
17	270	8.1	210	4.6	100	3.1	5.4	3.2
18	260	8.2	210	3.8	100	2.5	5.4	3.2
19	230	7.6	235				4.2	3.1
20	240	7.6					5.2	3.0
21	280	7.7					4.9	2.8
22	270	7.6					4.2	2.9
23	270	7.5					4.0	2.9

Time: 135.0°E.
Sweep: Lower limit of frequency 2.0 Mc.

Table 32 (Supersedes Table 10, CRPL-F24)

Baton Rouge, Louisiana (30.5°N, 91.2°W) July 1946

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00	300	5.4					3.0	3.0
01	300	5.0					2.9	3.0
02	300	4.8					2.4	2.9
03	300	4.7						3.0
04	300	4.7						3.0
05	300	4.6						3.0
06	300	5.5	250	3.6	130	2.3		2.9
07	305	6.4	240	4.2	120	2.8	4.2	2.9
08	345	7.3	230	4.5	120	3.2	4.6	2.9
09	350	8.0	230	4.8	120	3.4	4.5	2.9
10	370	8.2	225	5.0	120	3.6	4.7	2.8
11	370	8.1	220	5.1	120	3.6	4.4	2.9
12	380	8.6	220	5.2	120	3.7	4.6	2.8
13	360	8.8	240	5.2	120	3.6	4.0	2.8
14	360	8.2	235	5.1	120	3.6	4.4	2.8
15	360	8.4	240	5.1	120	3.5	4.4	2.9
16	350	8.6	240	4.9	120	3.4	4.6	2.9
17	310	8.3	240	4.4	120	3.0	4.5	3.0
18	290	8.0	250	3.7	130	2.3	4.6	3.0
19	260	7.4					4.6	3.1
20	250	6.6					3.5	3.0
21	250	6.4					3.5	3.0
22	270	6.0					3.4	2.9
23	290	5.8					3.0	2.9

Time: 90.0°W.
Sweep: 1.9 Mc to 9.9 Mc in three minutes, 30 seconds.

Table 33

Maui, Hawaii (20.8°N, 156.5°W) July 1946

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00	275	8.0						2.8
01	270	7.8						2.8
02	270	7.1						2.8
03	270	6.8						2.8
04	290	5.9						2.8
05	280	5.4						2.8
06	260	5.4						2.9
07	250	6.8	250			2.7		3.0
08	250	7.0				3.2		2.8
09	350	7.9	240	5.0				2.4
10	400	9.0	230	5.5				2.3
11	430	9.4	210	5.4				2.4
12	405	9.9	220	5.5				2.5
13	380	10.4	220	5.5				2.6
14	360	11.0	220	5.4				2.7
15	350	11.5	230	5.2				2.7
16	320	11.4	230	5.1				2.8
17	300	11.3	240	4.9				3.0
18	255	10.3	240					3.0
19	250	9.5						2.9
20	265	8.9						2.7
21	300	9.0						2.7
22	290	9.0						2.7
23	290	8.4						2.7

Time: 150.0°W.
Sweep: 2.2 Mc to 16.0 Mc in one minute.

Table 34

San Juan, Puerto Rico (18.4°N, 66.1°W) July 1946

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00		7.6						2.7
01		7.4						2.8
02		7.2						2.8
03		6.5						2.7
04		6.6						2.8
05		5.8						2.8
06		5.5						2.9
07	285	6.4						2.8
08	330	7.0	220	4.4		3.2	4.4	2.7
09	375	8.0	220	5.0		3.4		2.6
10	400	8.4	230	5.2		3.6		2.6
11	420	9.4	225	5.3		3.7		2.5
12	400	9.7	225	5.3		3.8		2.5
13	380	9.9	225	5.3		3.8		2.6
14	400	9.7	230	5.2		3.9		2.6
15	380	10.4	230	5.2		3.7		2.6
16	370	10.3	250	5.0		3.5	4.6	2.7
17	355	10.2	240	4.5		3.2	5.0	2.7
18	320	9.4					4.4	2.8
19	300	8.8						2.8
20		8.5						2.8
21		8.2						2.8
22		7.9						2.8
23		7.7						2.6

Time: 60.0°W.
Sweep: Record centered on the hour.

Table 35 (Supersedes Table 11, CRPL-F24)

Trinidad, British West Indies (10.6°N, 61.2°W) July 1946

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00	260	9.4						2.9
01	255	9.0						2.9
02	250	8.4						2.9
03	260	7.8						3.0
04	250	7.0						3.1
05	260	6.4						3.1
06	250	6.8					2.3	3.2
07	240	7.2			120	2.6	3.4	3.1
08	280	7.9	220	5.0	110	3.2	4.0	2.9
09	350	8.7	220	5.3	110	3.5	4.4	2.6
10	360	9.5	220	5.6	110	3.8	4.6	2.5
11	370	10.8	215	5.5	120	4.0	4.8	2.6
12	350	11.4	220	5.6	110	4.1	4.8	2.7
13	350	11.8	220	5.5	120	4.0	5.1	2.7
14	355	11.7	220	5.4	120	4.0	5.1	2.7
15	335	11.8	220	5.3	110	3.8	5.1	2.8
16	320	11.8	230	5.1	120	3.4	5.0	2.8
17	310	11.3	225	4.7	120	3.0	4.6	2.8
18	260	10.4			110	2.2	3.8	2.8
19	270	10.0					4.4	2.8
20	290	10.0					3.8	2.7
21	280	10.5					2.4	2.8
22	280	10.1					2.1	2.8
23	270	10.0						2.9

Time: 60.0°W.
Sweep: Manual operation.

Table 36

Huancayo, Peru (12.0°S, 75.3°W) July 1946

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00	220	7.0						3.1
01	220	7.0						3.1
02	230	6.6						3.1
03	230	5.6						3.2
04	240	4.8						3.1
05	240	4.1						3.1
06	280	4.3				1.3		2.9
07	240	7.2				2.4	4.4	3.0
08	230	8.7				2.9	5.5	2.8
09	220	9.4	210	5.0			8.3	2.6
10	290	9.2	210	5.0			8.5	2.5
11	325	8.9	200	5.2			9.4	2.4
12	345	9.0	200	5.2			9.6	(2.4)
13	340	8.9	200	5.2			9.0	2.3
14	320	8.8	200	5.0			9.2	2.3
15	210	8.8					8.3	2.2
16	230	8.8				2.8	6.0	2.3
17	255	8.8				2.2	4.7	2.4
18	300	8.4				1.2		2.4
19	330	8.1						2.4
20	300	8.0						2.5
21	260	8.3						2.7
22	235	7.8						2.9
23	230	7.4						3.0

Time: 75.0°W.
Sweep: 16.0 Mc to 0.5 Mc in fifteen minutes.

Table 37

Peiping, China (39.9°N, 116.4°E) June 1946

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00		8.9						
01		8.4						
02		8.7						
03		8.9						
04		8.8						
05		9.0						
06		8.6						
07		9.5						
08		9.6						
09		10.2						
10		10.2						
11		10.3						
12		10.5						
13		10.7						
14		10.6						
15		10.0						
16		10.6						
17		10.5						
18		10.5						
19		9.8						
20		10.0						
21		8.8						
22		8.3						
23		8.5						

Time: 120.0°E.
Sweep:

Table 38

Chungking, China (29.4°N, 106.8°E) June 1946

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00	260	8.2					5.8	2.9
01	240	8.3					4.5	2.9
02	240	7.8					4.8	3.0
03	240	6.9					4.0	3.0
04	260	6.6					3.9	2.9
05	280	6.3					3.7	2.8
06	250	7.4	240	4.0	100	2.6	4.4	2.9
07	270	7.8	235	4.4	100	3.0	5.7	3.0
08	270	8.2	240	4.8	100	3.4	7.6	2.9
09	320	9.0	220	5.1	100	3.8	9.2	2.8
10	330	9.1	220	5.2	100	4.0	9.1	2.7
11	340	10.2	220	5.2	100	4.1	10.2	2.7
12	340	10.5	220	5.4	90	4.1	11.0	2.7
13	320	11.7	210	5.4	90	4.2	10.5	2.8
14	320	11.3	210	5.2	100	4.0	7.1	2.8
15	310	11.5	220	5.0	100	3.9	6.2	2.8
16	295	11.5	220	4.9	90	3.4	5.8	2.9
17	280	11.5	220	4.6	90	3.1	5.8	2.9
18	240	11.5			90	2.7	5.8	3.0
19	240	10.1					5.6	3.1
20	240	9.0					4.0	2.9
21	260	8.9					5.0	2.9
22	280	8.8					4.6	2.8
23	260	8.8					6.0	2.9

Time: 105.0°E.
Sweep: 2.1 Mc to 16.1 Mc in fifteen minutes.

Table 39 (Supersedes Table 18, CRPL-F24)

Guam Island (13.5°N, 144.8°E) June 1946

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00		8.6					2.6	2.8
01		7.0					2.4	2.8
02		6.9					2.2	2.9
03		6.6						3.0
04		6.4						3.1
05		5.5						3.2
06		6.0					2.4	3.2
07		7.3					5.8	3.1
08		8.2		4.2		3.3	6.8	2.9
09		8.7		5.0			7.2	2.7
10		9.5		5.3			6.8	2.6
11		9.7		5.5			6.6	2.5
12		10.1		5.5		4.0	7.2	2.4
13		10.4		5.5			6.6	2.4
14		11.3		5.4			7.0	2.5
15		11.5		5.3			7.0	2.5
16		11.8		5.1			7.0	2.6
17		11.8		4.7			7.0	2.6
18		11.7					6.9	2.7
19		11.4					6.9	2.7
20		10.3					6.2	2.5
21		9.2					3.5	2.5
22		9.1					3.6	2.6
23		8.4						2.6

Time: 150.0°E.
Sweep: Manual operation.

Table 40 (Supersedes Table 19, CRPL-F24)

Leyte, Philippine Is. (11.0°N, 125.0°E) June 1946

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00		8.4					3.5	2.8
01		7.6					3.0	3.0
02		7.4					2.2	3.0
03		6.8					< 1.6	3.0
04		6.3					< 2.0	3.1
05		5.5					2.3	3.2
06		4.9					< 2.2	3.0
07		7.2				2.2	3.6	3.0
08		8.8				3.0	5.2	2.9
09		9.3				3.5	5.4	2.6
10		9.4				3.8	6.0	2.4
11		9.4					6.0	2.3
12		9.4		5.5			6.8	2.3
13		9.7		5.4			< 7.0	2.3
14		9.9					8.5	2.3
15		10.0		5.4			6.8	2.3
16		10.2					7.0	2.4
17		10.5					7.1	2.4
18		10.6					5.9	2.5
19		10.5					6.1	2.5
20		9.5					4.8	2.5
21		9.1					(3.5)	2.5
22		8.2					(3.4)	2.5
23		8.2					3.5	2.6

Time: 135.0°E.
Sweep: Manual operation.

Table 41 (Supersedes Table 20, CRPL-F24)

Brisbane, Australia (27.5 S, 153.0 E) June 1946

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00	280	4.0						3.0
01	270	4.2						3.0
02	280	4.1						3.0
03	290	4.2						3.0
04	275	4.1						3.0
05	250	4.0						3.0
06	265	3.8						3.2
07	220	6.5						3.5
08	215	7.9				2.5		3.4
09	230	9.0	210		110	2.9		3.4
10	240	9.3	210		105	3.3		3.4
11	250	8.7	200	4.7	100	3.3	3.8	3.3
12	250	8.9	200	4.8	100	3.3	3.8	3.3
13	240	8.5	200	4.6	100	3.3	3.8	3.3
14	260	8.8	200	4.6		3.2	4.0	3.2
15	220	8.8			110	3.0	4.4	3.3
16	220	8.3				2.4	3.9	3.4
17	210	7.5						3.4
18	220	6.3						3.3
19	230	5.0					3.0	3.2
20	255	4.5						3.0
21	275	4.5						3.0
22	275	4.2						3.0
23	270	4.0						3.0

Time: 150.0°E.
Sweep: 2.2 Mc to 12.5 Mc in two minutes, thirty seconds.

Table 42

Townsville, Australia (19.4°S, 146.5°E) June 1946

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00	250	4.0					2.8	(3.1)
01	260	3.7					2.9	(3.2)
02	240	3.8					3.1	(3.2)
03	250	3.4					2.9	(3.1)
04	300	3.1					3.5	(2.9)
05	280	3.5					2.8	(2.9)
06	250	3.8					2.5	(3.0)
07	235	6.5				2.0	3.0	3.3
08	245	9.0				2.7	3.2	3.5
09	250	10.0	240	4.7		3.1	3.5	(3.4)
10	250	9.9	240	5.0		3.4	(4.4)	(3.4)
11	250	9.8	210	5.0		3.5	4.0	3.4
12	270	9.0	210	5.0		3.5	3.9	3.3
13	275	9.0	210	5.0		3.5	4.0	3.2
14	280	9.0	200	5.0		3.5	3.8	3.1
15	250	8.8		4.6		3.3	3.4	3.2
16	250	8.6				2.9	3.3	3.2
17	242	8.3				2.3	3.2	3.2
18	225	7.5					3.4	3.2
19	240	5.5					3.0	3.2
20	225	4.5					3.2	3.0
21	255	4.6					2.9	2.9
22	250	4.3					2.7	3.0
23	250	4.2					2.7	3.0

Time: 150.0°E.
Sweep: 1.0 Mc to 13.0 Mc in one minute, fifty-five seconds.

Table 43

Canberra, Australia (35.3°S, 149.0°E) June 1946

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00	300	4.0						2.8
01	300	4.0						2.8
02	300	3.9					2.1	2.7
03	305	4.0					2.1	2.7
04	300	4.1						2.8
05	270	4.1					1.8	2.8
06	260	3.6					2.5	3.0
07	250	4.5					2.4	3.0
08	250	6.6			120	2.3		3.1
09	250	8.0	250	3.8	110	2.7		3.1
10	260	8.5	240	4.2	110	3.0		3.1
11	250	8.5	240	4.3	110	3.2	3.5	3.1
12	260	8.6	245	4.3	110	3.2	4.0	3.1
13	270	8.5	245	4.4	110	3.2	4.4	3.0
14	260	8.6	240	4.0	110	3.0	3.6	3.0
15	250	8.5	250	4.0	110	2.8	3.6	3.1
16	250	8.0			120	2.4	3.1	3.1
17	250	7.4					2.4	3.0
18	250	6.0						3.0
19	250	5.0						3.0
20	260	4.4						2.9
21	290	4.0						2.9
22	300	3.9						2.8
23	300	3.8						(2.8)

Time: 150.0°E.
Sweep: 1.6 Mc to 12.5 Mc in two minutes.

Table 44

Hobart, Tasmania (42.8°S, 147.4°E) June 1946

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00	262	2.7					2.3	3.2
01	275	2.6					3.5	3.2
02	278	2.6					2.8	3.1
03	265	2.6					2.8	3.2
04	260	2.7					3.1	3.2
05	250	2.8					2.8	3.3
06	240	2.5					2.8	3.4
07	250	2.7					2.8	3.3
08	225	5.2				2.0	2.8	3.5
09	230	7.0			110	2.5	2.8	3.5
10	230	7.5	210			2.8	3.0	3.5
11	250	8.2	215	4.0	100	3.0	3.0	3.4
12	250	8.5	215	4.1		3.0	3.5	3.3
13	248	8.9	200	4.1		3.0	3.5	3.3
14	245	8.6	225	4.0		2.8	3.0	3.4
15	230	8.5	225			2.6	2.9	3.4
16	225	8.2				2.2	2.8	3.3
17	210	7.2				1.4	2.8	3.3
18	225	6.1					2.4	3.3
19	225	4.9					1.7	3.3
20	228	3.8						3.2
21	240	3.4					2.3	3.2
22	252	3.0					2.0	3.2
23	268	2.8					2.6	3.1

Time: 150.0°E.
Sweep: 1.0 Mc to 13.0 Mc in one minute, fifty-five seconds.

Table 45

Tromsø, Norway (69.7°N, 18.9°E) May 1946

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00	362	(5.3)						
01	330	(5.7)						
02	312	(5.5)						
03	340	5.5		3.8		2.3		
04	327	(5.5)				2.7		
05	330	5.7		(4.2)		2.9		
06	355	5.9		4.6		3.0		
07	350	5.8		4.7		3.1		
08	324	6.0		4.6		3.2		
09	360	6.0		4.7		3.3		
10	360	6.1		4.8		3.3		
11	340	6.1		4.9		3.3		
12	355	6.1		4.8		3.3		
13	380	6.0		4.8		3.2		
14	350	5.9		4.6		3.2		
15	327	5.9		4.6		3.0		
16	324	6.0		4.4		2.9		
17	300	5.9		4.0		3.0		
18	310	5.7				3.2		
19	310	5.5				3.0		
20	340	5.3				3.2		
21	340	5.6				2.5		
22	350	5.2				2.9		
23	350	5.3						

Time: 0.0°E.
Sweep: 0.8 Mc to 11.4 Mc in five minutes.

Table 46

Peiping, China (39.9°N, 116.4°E) May 1946

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00		(8.0)						
01		8.0						
02		7.4						
03		6.8						
04		6.2						
05		(6.4)						
06		(8.0)						
07		8.0						
08		8.8						
09		10.0						
10		10.5						
11		10.5						
12		10.6						
13		11.0						
14		11.5						
15		11.4						
16		10.8						
17		10.5						
18		10.0						
19		9.9						
20		(9.1)						
21		8.5						
22		8.2						
23		8.0						

Time: 120.0°E.

Table 47

Cairo, Egypt (30.6°N, 31.9°E) May 1946

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00		8.8					3.5	(2.7)
01		8.8					3.4	
02		8.0					3.4	2.8
03		8.0					3.0	
04		7.4					3.0	(2.9)
05		7.1					2.9	
06		8.0					3.4	3.1
07		8.8					4.5	
08		8.6					5.4	3.0
09		9.3					6.6	
10		9.6					5.6	2.7
11		10.5					5.4	
12		11.3					6.2	2.8
13		11.6					5.0	
14		11.9					4.5	2.9
15		11.2					4.8	
16		10.6					4.8	3.0
17		10.4					4.8	
18		10.4					5.0	3.0
19		9.8					3.8	
20		9.0					5.6	2.9
21		8.6					5.0	
22		9.0					4.8	
23		8.6					4.1	

Time: 30.0°E.
*Data sheet labeled "Extent of E".

Table 48

Okinawa (26.3°N, 127.8°E) May 1946

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00		9.1					5.0	(2.8)
01		(9.2)					5.9	(2.9)
02		8.8					5.2	(3.1)
03		7.6					4.2	2.9
04		6.8					4.0	2.8
05		6.5					4.0	2.9
06		6.8					4.0	3.1
07		7.8				2.6	5.0	3.2
08		8.2				3.1	5.6	3.1
09		8.5		5.0		3.4	5.8	2.9
10		8.7		5.0		3.7	5.9	2.7
11		10.5		5.6		3.8	6.3	(2.7)
12		12.0		5.7		4.0	5.8	2.8
13		12.8		5.5		3.9	5.4	2.8
14		13.0		5.4		3.9	5.4	2.9
15		13.0		5.2		3.7	5.5	2.8
16		13.2		5.0		3.4	5.4	2.9
17		13.2		4.6		3.0	5.0	(3.0)
18		12.6				2.5	5.4	3.0
19		11.5					4.9	(3.1)
20		9.9					6.6	(2.9)
21		9.0					6.0	(2.7)
22		8.9					6.1	2.6
23		(9.5)					5.8	(2.7)

Time: 135.0°E.

Table 49

Guam I. (13.5°N, 144.8°E) May 1946

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00		9.7						2.8
01		8.6						2.9
02		8.6					2.0	2.9
03		8.7						3.1
04		7.3					2.2	3.3
05		5.8					2.2	3.2
06		5.5					3.2	3.1
07		7.7					6.2	3.2
08		9.0					7.2	2.9
09		9.6		5.0			7.2	2.7
10		10.2		5.4			6.4	2.5
11		10.9		5.5			6.8	2.4
12		11.5		5.6			6.7	2.4
13		12.2		5.7			6.0	2.4
14		12.5		5.5			5.8	2.5
15		12.8		5.4			6.3	2.5
16		13.5		5.0		3.5	6.4	2.5
17		13.7					7.0	2.6
18		13.0					6.8	2.6
19		12.2					5.8	2.5
20		11.2					3.2	2.5
21		10.5					3.0	2.4
22		10.0					2.6	2.5
23		9.7					2.5	2.6

Time: 150.0°E.
Sweep: Manual operation.

Table 50

Oslo, Norway (59.9°N, 11.0°E) April 1946

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00	305	(5.2)						
01	320	(4.6)						
02	318						2.5	
03	300	(4.6)					2.5	
04	290	(4.5)					2.5	
05	270	4.2					2.7	
06	240	5.2				2.3	3.6	
07	240	5.7				2.5		
08	240	6.0		4.1		2.8		
09	260	6.3		4.4		3.1		
10	250	6.5		4.6		3.3		
11	298	6.9		4.6		3.4		
12	320	6.6				(3.4)		
13	300	6.9		4.5		3.4		
14	290	7.0		4.6		3.3		
15	270	6.9		4.6		3.2		
16	240	7.1				3.0		
17	230	7.4				2.7		
18	240	7.2				2.3		
19	250	7.0				2.0		
20	240	7.0				1.6		
21	250	6.5						
22	270	6.0						
23	300	5.5						

Time: 15.0°E.
Sweep: 16.0 Mc to 1.63 Mc in ten minutes.

Table 51 (Supersedes Table 19, CRPL-F23)

Burgheed, Scotland (57.7°N, 3.5°W) April 1946

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00		5.6						
01		5.5						
02		5.3						
03		5.2						
04		4.8						
05		4.5						
06		5.4						
07		6.0						
08		6.4						
09		7.0						
10		7.2						
11		7.6						
12		8.0						
13		7.8						
14		7.9						
15		7.8						
16		7.8						
17		7.9						
18		7.7						
19		7.8						
20		7.4						
21		6.9						
22		6.5						
23		6.1						

Time: 0.0°.
Sweep: 1.0 Mc to 13.0 Mc. Manual operation.

Table 52 (Supersedes Table 22, CRPL-F23)

Moscow (Krasnaja Pakhra), U.S.S.R. (55.5°N, 37.3°E) April 1946

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00		5.0						
01		4.5						
02		4.2						
03		3.8						
04		3.9						
05		4.8						
06		5.6						
07		6.3						
08		7.1						
09		8.2						
10		8.7						
11		9.0						
12		9.0						
13		8.6						
14		8.4						
15		8.5						
16		8.4						
17		8.2						
18		8.4						
19		8.1						
20		7.3						
21		6.2						
22		5.4						
23		5.3						

Time: 30.0°E.
Sweep: 1.8 Mc to 10.0 Mc in ten minutes. Manual operation.

Table 53

Slough, England (51.5°N, 0.6°W) April 1946

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00		5.5						
01		5.4					0.8	
02		4.9					1.2	
03		4.5					0.8	
04		4.2					1.0	
05		4.1						
06		5.3						
07		5.8						
08		6.4						
09		7.2						
10		7.8						
11		8.1						
12		8.4						
13		8.6						
14		8.6						
15		8.6						
16		8.4						
17		8.3						
18		8.5						
19		8.2						
20		7.4						
21		6.9						
22		6.2						
23		5.9						

Time: 0.0°.
Sweep: 0.5 Mc to 16.0 Mc in four minutes.

Table 55

Tromso, Norway (69.7°N, 18.9°E) March 1946*

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00	(298)						4.2	
01							4.5	
02								
03		(4.5)						
04		(4.9)						
05	(274)	(5.5)						
06	(252)	(6.0)						
07	(267)	(6.3)						
08	(250)	(6.8)						
09	(243)	(6.5)				2.7		
10	(236)	7.4						
11	248	(7.6)				2.7		
12	250	7.8				2.8		
13	246	7.4				2.8		
14	(227)	(7.5)						
15	246	7.0				2.6		
16	(245)	(7.1)						
17	(244)	(7.0)						
18								
19	(295)	(6.3)						
20		6.0					3.2	
21							4.2	
22		(5.3)					3.2	
23	316	(5.4)					3.6	

Time: 0.0°E.
Sweep: 0.8 Mc to 11.4 Mc in five minutes.
*No observations recorded from the thirteenth through the twenty-seventh day of the month.

Table 54

Colombo, Ceylon (6.6°N, 80.0°E) April 1946

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	*fEs	F2-M3000
00		(10.2)						(3.1)
01		(9.1)						
02		(8.2)						(3.1)
03		(6.8)						
04		(6.3)						3.2
05		5.3						
06		5.2						3.2
07		9.0					3.2	
08		10.9					3.9	3.0
09		11.4					5.4	
10		10.2					5.2	2.4
11		9.7					4.8	
12		10.0					5.0	2.5
13		10.2					4.8	
14		10.6					4.8	2.4
15		10.9					4.1	
16		(11.0)					3.7	2.6
17		(11.2)					3.1	
18		(11.0)						(2.8)
19		(10.9)						
20		(10.5)						(2.3)
21		(10.6)						
22		(10.6)						
23		(10.8)						

Time: Local.
Sweep: 2.0 Mc to 16.0 Mc in one minute.
*Data sheet labeled "Extent of E".

Table 56 (Supersedes Table 23, CRPL-F23)

Burghead, Scotland (57.7°N, 3.5°W) March 1946

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00		5.0						
01		4.7						
02		3.4						
03		3.7						
04		3.7						
05		3.7						
06		4.1						
07		5.1						
08		5.8						
09		6.7						
10		6.7						
11		7.1						
12		7.4						
13		8.0						
14		7.9						
15		7.7						
16		7.4						
17		7.2						
18		7.0						
19		6.8						
20		6.1						
21		5.5						
22		4.7						
23		4.4						

Time: 0.0°.
Sweep: 1.0 Mc to 13.0 Mc. Manual operation.

Table 57 (Supersedes Table 24, CRPL-F22

Moscow (Krasnaja Pakhra), U.S.S.R. (55.5°N, 37.3°E) March 1946

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	F2-M3000
00		3.7						
01		3.5						
02		3.2						
03		3.2						
04		2.8						
05		2.8						
06		4.2						
07		5.8						
08		7.1						
09		8.2						
10		9.2						
11		9.6						
12		10.1						
13		10.0						
14		10.0						
15		9.5						
16		9.2						
17		8.5						
18		8.2						
19		7.0						
20		5.3						
21		4.6						
22		4.3						
23		4.1						

Time: 30.0°E.
Sweep: 1.8 Mc to 10.0 Mc in ten minutes. Manual operation.

Table 58

Slough, England (51.5°N, 0.6°W) March 1946

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	F2-M3000
00	389	4.5						2.5
01	399	4.3					1.1	2.5
02	399	4.0					1.0	2.5
03	393	3.8					1.0	2.5
04	384	3.0					0.7	2.6
05	380	2.9						2.6
06	346	3.7						2.8
07	281	5.9						3.1
08	286	6.8						3.1
09	294	7.8						3.0
10	302	8.6						3.0
11	304	9.0						3.0
12	312	9.4						3.0
13	304	9.5						3.0
14	304	9.6						3.0
15	297	9.5						3.0
16	296	9.3						3.1
17	286	8.8						3.1
18	296	8.6					1.6	3.0
19	297	7.8						3.0
20	322	6.6						2.9
21	352	5.8						2.7
22	372	5.1						2.6
23	387	4.8						2.5

Time: 0.0°.
Sweep: 0.5 Mc to 16.0 Mc in four minutes.
Median values except for F2-M3000, which are computed from average values.

Table 59 (Supersedes Table 13, IRPL-F20)

Burghead, Scotland (57.7°N, 3.5°W) February 1946

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	F2-M3000
00		3.4						
01		3.4						
02		3.4						
03		3.1						
04		3.0						
05		3.2						
06		3.0						
07		3.6						
08		5.2						
09		6.2						
10		7.2						
11		7.4						
12		7.6						
13		7.7						
14		7.7						
15		7.6						
16		7.4						
17		7.2						
18		6.6						
19		5.6						
20		4.4						
21		4.0						
22		3.8						
23		3.6						

Time: 0.0°.
Sweep: 1.0 Mc to 13.0 Mc. Manual operation.

Table 60

Moscow (Krasnaja Pakhra), U.S.S.R. (55.5°N, 37.3°E) February 1946

Time	h'F2	foF2	h'F1	foF1	h'E	foE	fEs	F2-M3000
00		2.6						
01		2.6						
02		2.6						
03		2.4						
04		2.4						
05		2.4						
06		2.6						
07		4.6						
08		6.8						
09		8.1						
10		9.0						
11		9.4						
12		8.9						
13		9.2						
14		8.8						
15		8.2						
16		7.7						
17		6.0						
18		4.6						
19		4.0						
20		3.2						
21		2.9						
22		2.7						
23		2.6						

Time: 30.0°E.
Sweep: 1.8 Mc to 10.0 Mc in ten minutes. Manual operation.

Table 61

Slough, England (51.5°N, 0.6°W) February 1946

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00	373	3.2						2.6
01	380	3.2					0.9	2.6
02	381	3.1					0.6	2.6
03	382	3.0					0.6	2.5
04	380	2.7					0.6	2.6
05	359	2.3					0.7	2.7
06	358	2.4						2.7
07	310	4.0						3.0
08	255	6.4						3.3
09	256	7.2						3.3
10	266	7.8						3.2
11	274	8.2						3.2
12	266	8.6						3.2
13	273	8.4						3.2
14	270	8.4						3.2
15	258	8.3						3.3
16	264	7.8						3.3
17	271	7.5					2.0	3.3
18	287	6.5					1.7	3.1
19	306	5.6						2.9
20	317	4.4						2.9
21	345	3.7						2.7
22	352	3.4					2.0	2.7
23	372	3.2						2.6

Time: 0.0°.
Sweep: 0.5 Mc to 16.0 Mc in four minutes.
Median values except F2-M3000, which are computed from average values.

Table 62

Slough, England (51.5°N, 0.6°W) January 1946

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00	351	2.9						2.7
01	359	2.9					2.5	2.7
02	353	3.0					1.1	2.7
03	352	2.8						2.8
04	335	2.4					1.0	2.9
05	324	2.3						2.9
06	310	2.2						2.9
07	320	2.4						2.8
08	251	4.8				(1.6)	1.4	3.4
09	241	6.1				(2.1)		3.5
10	236	6.6				(2.4)		3.5
11	234	7.0				(2.6)		3.5
12	236	7.2				(2.6)		3.5
13	243	7.1				(2.6)		3.5
14	249	6.8				2.4		3.4
15	233	6.7				(2.1)		3.5
16	243	5.7				(1.8)	2.4	3.4
17	275	4.8					1.6	3.2
18	282	4.0						3.2
19	297	3.2						3.0
20	322	3.0						2.9
21	356	2.8						2.8
22	348	2.8						2.8
23	350	2.9						2.8

Time: 0.0°.
Sweep: 0.5 Mc to 16.0 Mc in four minutes.
Median values except for F2-M3000 values, which are computed from average values.

Table 62

Sverdlovsk, U.S.S.R. (56.7°N, 61.1°E) January 1946

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00	260	2.3						
01	250	2.4						
02	240	2.6						
03	230	2.6						
04	260	2.6						
05	290	2.6						
06	280	2.4						
07	260	2.2						
08	260							
09	230	2.7						
10	200	4.7						
11	210	6.3					100	2.6
12	210	6.8					100	2.5
13	200	7.0					100	2.5
14	200	7.5					100	2.6
15	200	7.4					100	2.7
16	200	6.6					100	2.4
17	250	6.1						
18	200	5.3						
19	200	3.8						
20	220	2.7						
21	260	2.3						
22	260	2.2						
23	260	2.2						

Time: 60.0°E.
Sweep: 1.5 Mc to 14.0 Mc in five to thirteen minutes. Manual operation.

Table 64

Peshawar, India (34.0°N, 71.5°E) January 1946

Time	**h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	*F2-M3000
00								
01								
02								
03								
04								
05								
06								
07	270	4.8						
08	270	6.0						3.4
09	270	6.7						
10	300	7.3						
11	300	7.4						
12	300	7.3						3.4
13	300	6.9						
14	300	6.6						
15	300	6.7						
16	270	6.3						3.2
17	270	5.6						
18	300	4.9						
19	300	4.2						
20	270	3.4						3.2
21	295	2.9						
22	270	2.8						
23								

Time: Local.
Sweep: Manual operation.
*M3000, average values; other columns, median values.
**Height at 0.83 f°F2.

Table 65

Delhi, India (28.6°N, 77.1°E) January 1946

Time	**h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	*F2-M3000
00	330	2.8						2.8
01	330	2.9						
02	360	2.6						
03	330	2.6						
04	360	2.5						2.6
05	345	2.5						
06	345	2.8						
07	330	4.7				2.9		
08	330	6.7				3.5		3.0
09	330	7.4				3.8		
10	330	7.6				3.5		
11	360	8.5				3.6		
12	360	8.4				3.2		2.8
13	345	8.2				3.4		
14	360	8.5				3.5		
15	360	8.3				3.5		2.8
16	360	7.5				3.5		
17	360	6.7				3.6		
18	330	5.5				3.3		
19	360	5.2						2.8
20								
21								
22	330	3.1				2.6		
23	330	3.0						

Time: Local.
Sweep: Manual operation.
*M3000, average values; other columns, median values.
**Height at 0.83 f°F2.

Table 66

Bombay, India (19.0°N, 73.0°E) January 1946

Time	**h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	*F2-M3000
00								3.3
01								
02								
03								
04								
05								
06								
07	270	6.3						
08	270	7.6						3.3
09	270	9.7						
10	300	10.4						
11	300	11.1						
12	300	11.2						3.1
13	330	11.5						
14	315	11.4						
15	300	11.4						
16	300	11.3						3.2
17	300	11.0						
18	300	10.4						
19	300	9.2						
20	300	8.4						3.2
21	270	7.5						
22	270	5.9						
23	270	3.9						

Time: Local.
Sweep: Manual operation.
*M3000, average values; other columns, median values.
**Height at 0.83 f°F2.

Table 67

Madras, India (13.0°N, 80.2°E) January 1946

Time	**h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	*F2-M3000
00								
01								
02								
03								
04								
05								
06								
07	300	5.7						
08	330	8.2						2.9
09	360	8.9						
10	360	9.0						
11	420	8.8						
12	420	8.9						2.5
13	420	9.0						
14	420	9.6						
15	420	9.7						
16	375	9.8						2.6
17	360	9.8						
18	360	9.6						
19	360	9.0						
20	330	8.4						3.1
21	300	8.0						
22	300	7.6						
23								

Time: Local
Sweep: Manual operation.
*M3000, average values; other columns, median values.
**Height at 0.83 f°F2.

Table 68

Oslo, Norway (59.9°N, 11.0°E) November 1945

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00		2.5						
01		2.6						
02		2.4						
03		2.4					2.4	
04		2.5					2.3	
05		2.4						
06		2.4						
07		2.5						
08		4.6						
09		6.0				2.1	2.7	
10		7.2				2.3	2.6	
11		8.2				2.5	3.0	
12		8.1				2.4	3.2	
13		8.2				2.4	3.0	
14		7.8				2.4	2.2	
15		7.3				2.0	3.2	
16		6.3					2.8	
17		5.8					2.8	
18		5.1						
19		3.4						
20		3.3						
21		3.2						
22		2.9					2.2	
23		2.7						

Time: 15.0°E.
Sweep: 16.0 Mc to 1.63 Mc in ten minutes.

TABLE 69.

IONOSPHERE DATA - I

Washington, D.C. (Location) Ionosphere Station

National Bureau Of Standards (Institution)

Hourly values of $h'F_2$ in (km) for August (Month) 1946

Records measured by: A.K.B. J.L.S.

TIME: 75° W MERIDIAN

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	270	250	300	310	310	290	(310)	350	350	350	(320)	390	400	410	360	360	350	(290)	300	260	240	260	260	280
2	[290]A	280	(290)	C	C	C	C	C	C	(430)	(430)	(530)	360	440	360	370	340	[320]C	290	250	240	250	280	[310]A
3	290	280	280	240	290	(280)	(330)	350	390H	(380)	370	380	[400]C	(450)	(440)	420	380	330	300	260	240	270	270	270
4	280	280	290	270	260	260	240	260	270	340	340	330	360	330	350	(360)	300	310	280	270	260	250	250	280
5	280	270	250	250	270	280	240	260	270	320	360	390	(380)	370	350	380	340	330	280	240	240	250	270	(280)
6	300	280	270	[290]A	(280)	310	(290)	300	330	(390)	(400)	360	410	[420]C	390	390	360	330	300	250	250	260	280	310
7	[310]A	310	280K	[260]A	300K	(310)K	460K	440K	450K	400K	G K	[500]C	480K	[500]C	[450]C	450K	440K	380K	310K	270K	280K	290K	280K	270K
8	300K	280K	270K	280K	260K	210K	230	260	270	300	410	370	400	370	400	380	360	[330]A	(320)	240	[240]A	(270)	260	270
9	[280]A	(290)	270	300	(300)	(280)	240	290	260	[320]A	(340)	330	350	380	340	330	320	290	280	(270)	[250]A	250	270	290
10	270	270	250	250	260	260	220	270	320	290	300	340	310	320	340	(320)	320	300	270	260	270	250	270	260
11	280	300	320	300	280K	280K	250K	500K	590K	440K	G K	460K	[500]C	500K	[460]C	480K	360K	410K	310K	230K	290K	280K	270K	280K
12	250	240K	260K	(290)K	300K	[270]C	(240)K	(380)K	390K	410K	400K	410K	(510)K	450K	410K	380K	390K	340K	300K	250K	270K	280K	(280)K	(300)K
13	[280]C	310K	310K	310K	300K	300K	(270)K	350K	(410)K	[420]C	G K	[380]C	(390)K	(430)K	(410)K	(370)K	370K	350K	300K	[270]A	250K	(250)K	[270]A	310K
14	320K	300K	300K	320K	270K	310K	(310)K	380K	[500]C	[450]C	(330)K	[330]C	[400]C	[420]C	410K	390K	400K	350K	280	260	240	270	240	280
15	300	300	270	260	250	290	260	340	310	280H	320	[340]C	(380)	440	(390)	360	350	290	280	250	220	250	270	290
16	290	270	280	260	300	290	240K	370K	410K	360K	480K	420K	(450)K	(420)K	360K	390K	380K	310K	270K	230K	220K	[240]A	240K	(290)K
17	320	300K	300K	300K	290K	320K	260K	370K	390K	530K	620	570K	550K	520K	480K	450K	450K	380K	310K	260K	(260)K	270K	300	290
18	290	270	300	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
19	C	C	C	C	C	C	C	C	C	320	370	350	(410)	380	360	[350]C	350	300	280	[250]A	240	270	260	270
20	270	270	260	250	270	260	250	290	310	320	310	340	320	370	370	360	310	290	270	230	230	240	260	260
21	280	280	250	250	260	260	250	230	240	260	310	320	(340)	350	330	300	300	270	250	230	220	230	250	270
22	[300]A	270	260	240	240	250	250	270	280	270	290	(300)	[330]C	(350)	(340)	(310)	300	270	260	230	260	C	C	C
23	C	270	260	250	250	250	250	250	260	300	280	320	330	[340]C	330	[320]C	300	290	260	250	230	230	260	260
24	260	260	270	290	280	280	250	[270]A	250	270	300	330	330	330	320	320	300	270	[270]A	260	(250)	240	250	290
25	280	C	C	C	270	[260]A	310	[310]A	340	430	360	430	400	[400]C	[370]C	350	340	(270)	230	260	240	250	250	240
26	260	260	250	260	[280]A	(280)	240	230	260	280	290	280	340	320	[330]C	[320]C	300	270	250	250	230	[240]A	250	250
27	280	300	300	280	260	250	250	270	260	270	270	[310]C	320	330	340	330	300	280	230	240	250	230	260	260
28	270	280	270	270	280	260	250	230	370	320	320	370	320	330	(350)	320	300	270	250	240	230	(250)	(270)	270
29	270	270	250	260	240	230	230	230	250	250	[300]C	[300]C	290	290	300	290	280	260	250	240	230	250	250	240
30	270	[280]A	230	250	250	270	240	250	240	310	280	310	310	320	320	300	290	270	260	250	250	240	260	280
31	350K	410K	390K	270K	300K	230K	250K	260K	430K	(460)K	490K	420K	450K	520K	490K	[420]C	400K	A K	A K	(290)K	260K	280K	(300)K	270K
Sum																								
Median	280	280	270	270	275	275	250	280	315	320	340	355	380	380	360	360	340	300	280	250	240	250	260	280
Count	29	29	29	27	28	28	28	28	28	30	30	30	30	30	30	30	30	29	29	30	30	29	29	29

TABLE 70

IONOSPHERE DATA- 2

Washington, D.C. (Location) Ionosphere Station

National Bureau Of Standards (Institution)

Hourly values of $f^{o}F_{2}$ in {Mc / kc} for August (Month) 1946

Records measured by: A.K.B. J.L.S.

TIME: 75° W MERIDIAN

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	(7.2)	(5.8)J	5.1	4.8	3.9F	3.9	5.1	5.9	6.4	(7.0)J	(7.2)	7.2	7.2	7.6	8.0	7.6	7.3	7.4	7.8	(7.1)	(7.1)	(6.8)	6.8	(6.0)J
2	6.1	(5.4)J	5.2	C	C	C	C	C	C	6.0	(6.2)J	6.4	(7.4)	(6.8)	7.6	7.6	7.8	[7.8]C	7.6	(7.0)	7.4	6.7	(6.2)	(6.1)
3	(6.1)J	6.0	(6.1)	(5.2)	(4.6)	(4.2)J	5.3	5.8	(6.1)H	(6.0)	(6.4)	(6.0)	[6.[]C	(6.4)	6.4	6.6	6.6	6.6	6.7	(6.2)J	(6.2)J	(6.4)	(5.8)	(5.4)J
4	5.0F	4.9F	4.9F	(4.5)F	4.4F	4.3F	(6.0)	7.3	7.6	7.4	8.4	8.6	8.6	8.2	8.4	8.1	7.9	7.8	8.2	8.4	(8.2)	(7.2)	7.0	(6.4)
5	6.1	6.1	5.8	(5.6)J	4.9	4.9	6.4	(7.6)	(7.2)	7.2	7.2	7.0	7.2	7.2	7.2	(7.2)	7.2	7.4	7.8	(8.4)	(7.4)	(6.8)J	(6.0)J	(5.5)J
6	(5.6)J	5.3	4.9F	4.4F	3.9F	4.0F	5.2	6.2	6.5	6.8	7.0	7.2	7.0	[7.0]C	7.0	7.1	7.2	(7.3)	(7.5)J	(7.4)J	(6.3)J	(6.3)J	(5.8)	(5.5)
7	5.4	5.3	5.6K	4.9K	3.6K	3.4K	4.5K	5.0K	5.2K	5.3K	<(4.9)CK	(5.7)JK	5.9K	[5.9]CK	[6.0]CK	6.0K	6.0K	(5.8)JK	5.8K	(5.8)K	5.5K	5.7K	5.3K	4.7K
8	(4.2)K	4.2K	4.0K	3.8K	3.7K	(4.1)K	(5.7)J	(6.0)	(7.0)	6.7	6.6	6.8	6.8	7.0	7.0	6.8	7.2	[7.3]A	(7.4)	(7.4)	(6.9)	(6.8)	6.0	5.7
9	[5.5]A	(5.4)J	(4.8)	4.3	(3.9)	3.7	5.0	(5.8)J	6.9	7.6	7.8	7.8	7.9	7.6	8.4	8.0	8.0	7.5	7.8	(8.2)	7.8	(6.4)J	6.0	(5.6)J
10	5.8	(5.3)	4.9	(4.2)J	4.0	4.0	5.5	6.9	8.0	8.7	9.0	8.8	9.0	(8.4)	8.7	8.6	8.6	8.6	8.6	(9.2)	8.8	(7.4)	7.0	(6.4)J
11	6.0	(5.5)J	5.4	5.2	5.1K	4.6K	4.7K	4.7K	(5.0)K	(5.5)JK	<50CK	5.7HK	[5.4]CK	5.8K	[6.0]CK	6.2K	6.4K	7.0K	(6.2)JK	(6.3)K	6.0K	6.0K	(6.4)JK	5.5K
12	5.0K	4.4K	3.8K	3.1K	2.8K	2.9K	4.4K	5.0K	(5.3)K	(5.8)K	(5.8)JK	6.0K	(5.7)JK	6.0K	6.3K	6.0K	6.2K	(6.3)K	(6.2)K	6.6K	(7.2)K	(6.2)JK	4.8FK	(4.5)FK
13	3.6FK	3.2FK	(3.2)FK	(2.9)JK	(2.9)JK	3.1K	4.7K	5.2K	(5.2)K	[5.0]CK	<(5.0)CK	(6.0)K	6.0K	6.2K	6.2K	6.2K	6.0K	6.2K	6.3K	(6.4)JK	(6.8)JK	(6.0)K	(5.1)K	(5.0)K
14	4.9K	4.6FK	4.4FK	4.2K	3.6FK	3.0FK	3.9FK	(4.7)K	[5.0]CK	(6.0)K	6.6K	(6.2)K	6.0K	[6.2]CK	6.7K	6.7K	7.0K	7.6K	8.0	(7.8)J	6.8	(6.6)	5.8	(5.2)
15	(4.7)	(4.8)	4.3	3.8	2.8	2.8	4.5	5.3	6.7	(7.2)	7.2	(6.9)	7.4	7.0	7.1	7.3	7.1	7.1	7.6	(7.8)J	6.9	(6.0)J	(5.0)	4.9
16	4.8	(4.5)	3.9	3.7	(3.4)J	(2.7)	4.2K	4.9K	5.3K	5.6K	5.4K	6.0K	6.1K	6.6K	6.8K	6.8K	7.7K	8.0K	8.6K	(8.8)K	7.5K	(7.2)K	(5.7)K	4.2K
17	3.9K	4.0K	3.5FK	(3.1)FK	(2.1)K	2.4FK	4.1K	5.1K	5.1K	5.3K	5.2K	5.3K	5.3K	5.4K	5.7K	5.7K	5.6K	6.0K	6.0K	(6.0)K	5.7K	(5.0)K	(4.8)	(4.5)
18	(4.5)J	(4.3)F	3.9F	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
19	C	C	C	C	C	C	C	C	C	6.8	6.8	6.6	6.7	6.7	6.8	[6.8]C	6.8	(7.1)	(7.3)	(7.2)	6.8	(6.4)J	6.0	(5.4)
20	5.2	4.8	4.6	4.1	3.8	3.4	4.9	6.0	6.7	7.2	7.5	(7.4)J	7.3	7.4	7.6	7.6	7.9	(8.2)	8.5	8.4	(7.6)	(6.5)	(6.1)	[5.5]C
21	5.3	5.2	5.1	4.5	4.0	3.7	5.6	7.2	(8.0)J	(8.2)	8.5	8.4	8.4	8.6	8.7	8.8	8.5	8.6	(8.4)	(8.8)	[8.2]C	(7.4)	(6.5)J	(6.0)J
22	[6.0]C	5.9	5.6	5.2	4.6	4.2	(5.5)	[6.[]C	8.1	8.0	8.3	8.6	8.4	8.5	9.0	8.9	8.6	8.7	C	C	5.7	C	C	C
23	C	5.6	5.4	5.0	4.6	[4.3]C	6.0	7.8	8.4	8.8	(8.9)J	8.9	9.0	8.9	(8.9)	[9.[]C	8.9	(8.6)	C	C	C	C	C	(6.0)
24	(5.9)	5.7	5.2	5.1	4.9	4.8	5.8	7.6	8.6	9.2	9.5	10.0	(10.2)	10.0	(9.5)	9.1	8.8	8.4	8.5	8.5	(8.2)	7.1	[6.7]C	6.4
25	(6.1)	C	C	C	4.6	(4.0)	5.0	5.5	6.1	5.8	6.6	6.7	7.0	[7.0]C	[7.[]C	7.1	7.0	7.0	6.6	6.9	7.0	6.8	6.1	(5.8)
26	5.3	5.1	4.9	4.5	4.1	3.9	(5.5)	7.1	8.4	8.3	8.8	8.6	8.6	8.9	[9.0]C	[8.9]C	8.8	8.5	8.4	(8.9)	8.4	(7.6)J	(6.3)	6.0
27	5.6	5.3	5.0	5.3	5.3	4.7	5.7	7.6	8.2	(9.2)	8.8	[9.0]C	8.7	8.7	8.9	8.9	8.7	(9.0)	8.9	8.7	(8.1)	(7.3)	6.3	6.0
28	5.7	5.6	5.5	5.3	5.0	(4.1)	4.9	5.4	6.3	6.9	7.3	8.0	8.9	8.9	8.5	8.9	8.7	8.7	8.5	(7.8)J	[7.3]C	[6.8]C	(6.4)	(6.0)
29	(5.9)	(5.8)	5.6	4.8	4.5	3.8	(5.7)	[7.5]C	8.3	8.8	(9.2)	(8.8)	9.5	(9.8)	9.6	9.4	(9.2)	9.2	(9.4)	(9.0)	(8.2)	(7.2)	(7.3)	(6.8)
30	(6.3)	5.9	5.5	5.0	4.5	4.3	5.4	6.6	7.2	8.0	8.3	(8.4)	(8.4)	8.8	9.0	8.8	9.2	(9.2)	(9.0)	C	C	C	C	(7.1)
31	6.0K	2.6FK	(2.8)FK	(3.5)FK	(3.7)FK	3.8K	4.1K	4.8K	(5.5)	6.0K	(5.7)K	(6.0)K	(6.0)K	5.7K	6.0K	[5.8]CK	(5.8)JK	(5.3)K	5.8K	6.0K	6.2K	5.8K	(5.1)JK	4.8K
Sum																								
Median	5.6	5.3	4.9	4.5	4.0	4.0	5.2	6.0	6.7	7.0	7.2	7.1	7.2	7.1	7.4	7.4	7.5	7.6	7.8	(7.8)	7.2	(6.7)	(6.0)	(5.6)
Count	29	29	29	27	28	28	28	28	28	30	30	30	30	30	30	30	30	30	28	27	28	27	27	29

TABLE 71

IONOSPHERE DATA - 3

Washington, D.C. (Location) Ionosphere Station

National Bureau Of Standards (Institution)

Half hourly values of f^0F_2 in Mc/sec for August (Month) 1946

Records measured by: A.K.B. J.L.S.

TIME: 75°W MERIDIAN

Day	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130	1230	1330	1430	1530	1630	1730	1830	1930	2030	2130	2230	2330
1	6.2	5.2	4.8	(4.4)J	4.0	4.5	5.4	(6.4)	6.6	(7.0)	7.0	7.0	7.6	7.9	7.8	7.4	(7.4)J	7.5	7.8	(7.2)	7.1	6.8	6.2	6.1
2	(5.8)J	5.4	C	C	C	C	C	C	6.2	(6.0)	[6.3]C	7.0	7.0	7.4	7.4	7.8	7.9	7.6	7.5	(7.4)	(7.0)	(6.2)	(6.1)	6.0
3	6.0	6.2	(5.8)J	(5.0)	4.3	4.7	5.6	6.1	6.1	6.4	[6.2]C	5.9	(6.2)	(6.2)	6.4	6.5	6.8	6.6	6.7	(6.2)J	(6.2)J	6.2	(5.2)J	(5.1)
4	5.1F	4.9F	4.7F	4.5F	4.2F	5.0	6.6	(7.2)	7.2	7.8	8.6	8.6	8.4	8.3	8.2	8.1	7.8	8.0	7.8	8.2	(7.5)	7.2	6.8	6.3
5	(6.2)	6.0	(5.8)J	5.1	4.6	(5.8)J	7.2	7.3	(7.8)	(7.4)	(7.0)	7.4	(7.3)	7.3	7.2	7.2	7.3	7.8	(8.2)	(8.0)	(7.0)J	(6.4)J	(5.8)J	(5.5)J
6	(5.5)J	5.2	5.0	4.2	3.9	4.7	5.8	6.4	6.6	7.0	7.2	7.0	6.9	7.0	7.0	7.0	7.0	7.3	7.6	7.0	(6.4)J	(6.2)	(5.7)	5.5
7	(5.4)	5.4	(5.3)K	4.0K	(3.4)K	3.9K	4.8K	5.2K	(5.5)K	5.3K	(5.5)K	(6.0)JK	(5.9)K	(5.9)JK	6.2K	5.9K	(5.8)K	(5.8)JK	5.8K	5.5K	5.9K	5.5K	5.0K	4.4K
8	4.2K	4.0K	3.8K	3.7K	(4.1)K	5.1K	6.6	6.8	7.0	(6.6)	(6.8)J	6.7	7.0	6.8	7.2	7.2	7.2	7.4	7.8	(7.2)	7.2	6.6	(5.8)	5.7
9	(5.5)	(5.2)	(4.3)	4.0	3.7	4.2	5.3	6.3	7.3	[7.7]A	7.8	7.8	7.8	7.8	8.2	8.0	8.0	7.6	(8.2)	(8.0)	(8.0)	(6.4)J	6.0	(5.8)
10	(5.5)J	5.3	4.7	4.3	3.8	4.7	6.2	7.6	8.5	8.8	8.8	8.8	8.8	8.6	9.0	8.4	8.6	9.0	8.8	[9.0]C	(8.2)	7.0	6.8	6.2
11	5.6	(5.3)	(5.4)J	5.1	5.0K	4.5K	4.7K	4.9K	(5.3)K	(5.4)K	[5.5]CK	<5.0GK	(5.5)JK	6.0K	6.0K	6.3K	(6.0)JK	6.3K	(6.4)K	5.7K	(6.2)JK	6.1K	(5.6)JK	5.3K
12	4.8K	4.2K	3.5K	2.9K	(2.6)JK	3.6K	4.6K	5.2K	5.6K	(5.8)JK	(5.8)JK	(5.8)K	5.9K	(6.0)K	(6.2)K	6.2K	6.4K	(6.2)JK	6.6K	7.0K	(6.6)JK	(5.6)K	4.3K	3.8FK
13	3.4FK	(3.3)FK	(3.0)JK	(3.0)JK	(2.8)JK	3.8K	4.9K	5.2K	(5.2)HK	(5.6)JK	6.0K	5.8K	6.0K	6.2K	6.2K	6.2K	6.1K	6.4K	6.4K	6.6K	(6.8)K	(6.0)K	(4.9)K	(4.8)JK
14	4.9K	4.3FK	4.3FK	(4.1)K	2.8FK	(4.2)JK	(4.4)K	4.5K	[5.5]CK	(6.0)K	6.4K	6.3K	6.0K	6.4K	(6.8)K	7.0K	7.2K	7.9K	7.7	(7.2)	6.6	(6.4)	5.5	5.1
15	(4.7)	(4.5)	4.0	3.1	2.4	3.7	5.0	(6.2)J	(7.4)	7.7	[7.1]C	6.9	7.0	7.4	7.5	7.1	7.1	(7.2)	(7.8)	(7.8)J	6.2	(5.4)	(4.8)	4.9
16	4.6	4.2	3.9	(3.6)J	2.7F	(3.7)	4.5K	5.1K	5.7K	(5.3)K	(5.8)JK	(6.0)JK	6.4K	6.7K	6.8K	7.2K	8.0K	8.6K	[8.7]CK	(8.4)K	[7.3]CK	(6.0)K	4.7K	3.9K
17	3.9K	3.6FK	3.2FK	(2.6)FK	(1.9)FK	3.3K	4.5FK	<4.8GK	(5.0)K	5.4K	5.2K	5.5K	(5.3)K	5.7K	5.6K	5.6K	(5.8)K	5.8K	(6.2)K	(5.9)K	5.3K	4.8K	(4.5)	4.4
18	4.4F	4.2F	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
19	C	C	C	C	C	C	C	C	C	6.7	6.9	6.6	6.8	[6.7]C	[6.8]C	6.8	7.1	7.1	(7.3)	7.0	6.8	(6.2)	(5.7)J	5.3
20	4.9	4.7	4.3	4.0	(3.4)J	4.1	5.4	6.5	6.9	7.4	7.2	(7.4)	7.6	7.4	7.4	7.5	7.8	8.0	8.5	(8.0)	7.0	(6.2)	(5.8)J	5.3
21	5.3	5.1	4.8	4.2	3.7	4.6	6.6	7.6	8.3	8.2	8.6	8.4	8.3	8.8	8.9	8.6	8.5	(8.6)	8.8	[8.5]C	(7.8)J	6.8	[6.2]C	(6.2)J
22	5.7	5.9	5.6	5.1	4.3	4.8	[6.0]C	7.2	(8.4)J	8.3	8.4	8.6	8.6	8.8	8.8	8.7	(8.6)	8.6	C	C	C	C	C	C
23	C	5.5	5.2	4.7	4.4	5.1	[6.6]C	8.2	8.4	(9.0)J	8.8	9.0	8.9	9.1	9.1	9.0	8.5	C	C	C	C	C	(6.2)	(6.0)
24	(5.9)	5.4	5.0	5.0	4.7	4.9	6.6	8.1	9.2	9.4	9.7	10.2	10.2	(9.7)	9.2	8.9	8.7	8.5	8.5	(8.4)	(7.8)J	(6.8)	(6.6)	6.4
25	(5.7)	C	C	4.8	4.2	4.5	5.6	5.8	6.1	6.4	6.4	[6.9]C	6.9	[7.0]C	(7.2)	[7.0]C	7.0	6.8	6.8	(7.2)	(6.9)	(6.2)	6.0	5.5
26	5.3	5.0	4.6	4.2	3.9	4.6	6.3	8.0	8.0	8.9	8.8	8.4	8.9	9.0	[8.9]C	8.8	8.6	8.6	8.7	(9.2)	(8.1)	(7.0)	(6.1)	5.7
27	5.3	5.3	5.2	5.3	4.9	4.9	6.8	8.3	8.9	8.8	9.0	9.0	8.6	8.7	9.0	8.9	8.9	9.2	9.1	(8.3)	8.1	6.7	(6.1)	6.0
28	5.7	5.7	5.5	5.0	4.3	4.3	5.4	5.6	6.7	7.1	7.6	8.7	8.9	8.6	8.7	8.7	8.6	8.6	(8.3)	(7.8)	[7.0]C	[6.5]C	[6.2]C	6.0
29	5.8	5.8	5.0	4.7	3.9	4.7	[6.5]C	[8.0]C	(8.6)J	(9.0)J	9.2	(9.2)J	[9.7]C	10.0	9.4	[9.3]C	(9.2)	(9.2)	[9.2]C	9.0	[7.6]C	(7.6)	7.0	6.2
30	6.0	5.8	5.2	4.8	4.3	4.6	6.2	(7.2)	7.7	8.4	8.2	(8.6)	8.8	8.8	9.2	9.0	(9.3)	8.8	C	C	C	C	(7.2)	(6.4)J
31	(3.5)FK	2.8FK	3.3FK	(3.8)FK	5.6K	3.5FK	4.6K	5.3K	6.0K	5.5K	5.8K	(5.9)JK	[5.9]CK	5.7K	(5.8)JK	[5.8]CK	[5.6]CK	[5.6]CK	[5.9]CK	[6.1]CK	[6.1]CK	[5.5]CK	[4.9]CK	[4.6]CK
Sum																								
Median	5.4	5.2	4.8	4.2	4.0	4.6	5.6	6.4	6.9	7.0	7.0	7.0	7.2	7.4	7.4	7.3	7.6	7.6	7.8	7.4	(7.0)	(6.2)	(5.8)	5.5
Count	29	29	27	28	28	28	28	28	29	30	30	30	30	30	30	30	30	29	27	27	27	27	29	29

TABLE 72

IONOSPHERE DATA-4

Washington, D.C. (Location) Ionosphere Station

National Bureau Of Standards (Institution)

Hourly values of $h'F_1$ in [illegible] for August (Month) 1946

Records measured by: A.K.B. J.L.S.

TIME: 75° W MERIDIAN

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1							250	210	[24d]A	200H	230	200	210	[21d]C	(220)	220H	210H	260	A					
2							C	C	C	A	210H	(230)H	[21d]C	220	(210)	[22d]C H	220	[23d]C	A					
3							250	[23d]A	230H	210H	190	[21d]C	220H	220	220	220	230	250	240					
4								250	220	200	[20d]A	210	200H	200	200H	220H	230	230	240					
5								240	210	210	210	210	(230)	[22d]C	210	220	[23d]A	[24d]A	230					
6							250	250	230	210	210	210H	[22d]C	[22d]C	220	220H	220	230	250					
7							[28d]A K	[26d]A K	230K	230H K	210K	200H K	210K	(230)K	230K	220K	220K	[22d]C H K	240K					
8								220	230	210	220	200H	220	220	220	220	220H	A	A					
9								240	[23d]A	[22d]A	220	[21d]A	190	200H	210	A	A	A	A					
10								220	[22d]A	220	210	A	A	A	A	A	[23d]A	[23d]A	240					
11								220K	210K	220K	220K	200K	210K	220K	[24d]A K	220K	250K	[22d]A K	A K					
12								210K	210K	190K	190K	170H K	190H K	200K	210K	(220)K	230K	230K	C K					
13								230K	[22d]A K	[20d]C K	230K	210K	210K	210K	200H K	(230)K	200K	240K	(250)K					
14							260K	240K	[22d]C K	220K	230H K	190H K	200K	280H K	210K	[22d]C H	230K	240K	240					
15								240	210	(210)	[20d]A	[20d]C	[21d]C	230	230	220	240	230	240					
16								230K	210K	210H K	190H K	(210)H K	(180)H K	[21d]C K	230K	230K	240K	230K	250K					
17								210K	220K	230K	210K	180H K	200H K	230H K	220K	230K	230K	250K	A K					
18							C	C	C	C	C	C	C	C	C	C	C	C	C					
19							C	C	C	210	210	190H	220H	210	200	[22d]C	220	(230)						
20								240	220	210	190H	200	200	200	220	210H	220	210	230					
21									210	210	210	190	210	210	(220)H	220	210H	220	230					
22								220	220	210	190	180H	200	200	210	230	220	230	240					
23							230	230	220	210	200	200H	200	210H	200	210	220	220	230					
24								A	A	A	A	210	210	[21d]C	220	220	230	A						
25								A	210	220	200H	220	210	[21d]C	[22d]A	230	230	230						
26									230	210	200	210H	210	200	[21d]C	[22d]C	220	230						
27								240	230	220	200H	[20d]C	210	200	200	200H	220H	230						
28									A	210	210	200	A	A	A	A	[22d]A	220						
29									220	210H	210	(220)	200H	200	210H	210	220	[23d]C						
30								220	210	210	210	200	200	220	200H	220	230	230	250					
31								250K	220K	250H K	210K	220K	230K	230K	[25d]A K	C K	A K	A K	A K					
Sum																								
Median							250	230	220	210	210	200	210	210	215	220	220	230	240					
Count							6	22	26	28	29	30	28	28	28	26	28	26	15					

TABLE 73

IONOSPHERE DATA-5

Washington, D.C. (Location) Ionosphere Station

National Bureau Of Standards (Institution)

Hourly values of $f^{o}F_1$ in Mc for August (Month) 1946

Records measured by: A.K.B. J.L.S.

TIME: 75° W MERIDIAN

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1							L	4.2	4.8	5.1^{N}	[5.3]^{c}	5.3	5.3	5.1	5.3	(5.3)^{N}	5.2^{N}	L	L					
2							C	C	C	5.1	5.2^{N}	5.3^{N}	5.2	5.3	(5.4)	5.2^{N}	4.9	C	L					
3							L	(4.5)	5.0^{N}	5.0^{N}	5.0	(5.0)	(5.2)^{N}	5.2	5.2	5.3	(4.9)	L	L					
4								L	L	5.5	5.4	(5.4)	(5.5)^{N}	5.0	5.3^{N}	5.3^{N}	(4.7)	L	L					
5								L	4.5	5.0	(5.3)	5.3	(5.3)	5.2	5.0	5.2	(4.8)	(4.7)	L					
6							L	(4.2)	(4.7)	5.2	5.2	5.2	(5.4)	[5.2]^{c}	5.3	5.2^{N}	5.1	4.7	L					
7							L^{K}	(4.0)^{K}	4.7^{K}	4.8$^{N}_{K}$	(4.9)^{K}	5.0$^{N}_{K}$	5.1^{K}	5.1^{K}	5.0^{K}	4.8^{K}	4.7^{K}	(4.5)$^{N}_{K}$	L^{K}					
8								L	L	5.0	5.1	5.1^{N}	5.3	5.1	5.0	5.2	5.0^{N}	A	L					
9								L	[4.8]^{A}	[5.2]^{A}	5.4	(5.4)	(5.3)	5.7	5.3	5.1	(4.7)	A	A					
10								L	A	(5.1)	5.2	5.4	5.3	(5.2)	(5.2)	[5.1]^{c}	5.0	L	L					
11								4.2^{K}	4.4^{K}	4.7^{K}	5.0^{K}	5.0$^{N}_{K}$	5.0^{K}	5.0^{K}	5.0^{K}	4.8^{K}	4.6^{K}	4.4^{K}	L^{K}					
12								(4.2)^{K}	4.4^{K}	4.8^{K}	5.0$^{N}_{K}$	5.0$^{N}_{K}$	5.1$^{N}_{K}$	5.0^{K}	5.0^{K}	4.8^{K}	4.7^{K}	4.2^{K}	L^{K}					
13								4.2^{K}	(4.4)^{K}	[4.8]$^{c}_{K}$	(5.0)^{K}	5.0^{K}	5.0^{K}	5.1^{K}	5.0^{K}	5.0^{K}	4.7^{K}	4.5^{K}	L^{K}					
14							[3.3]$^{L}_{K}$	4.0^{K}	[4.5]$^{c}_{K}$	(5.0)^{K}	5.1$^{N}_{K}$	5.2$^{N}_{K}$	5.1^{K}	5.2$^{N}_{K}$	5.0^{K}	4.9^{K}	4.8^{K}	L^{K}	L					
15								L	4.6	5.0^{N}	5.0	(5.1)	5.2	(5.3)	5.3	5.1	4.9	L	L					
16								4.2^{K}	4.4^{K}	4.7$^{N}_{K}$	4.8$^{N}_{K}$	5.1$^{N}_{K}$	5.1$^{N}_{K}$	5.1^{K}	5.0^{K}	5.0^{K}	4.8^{K}	(4.2)^{K}	L^{K}					
17								(4.2)^{K}	4.5^{K}	4.6^{K}	4.8^{K}	4.9$^{N}_{K}$	5.0$^{N}_{K}$	4.9$^{N}_{K}$	4.8^{K}	4.8^{K}	4.6^{K}	4.2^{K}	L^{K}					
18							C	C	C	C	C	C	C	C	C	C	C	C	C					
19							C	C	C	4.7	5.1	5.1^{N}	5.3^{N}	5.1	5.0	[4.9]^{c}	(4.9)	L						
20								L	(4.7)	5.0	5.1	5.3	(5.2)	5.4	(5.3)	(5.1)	[4.7]^{c}	(4.5)	L					
21									L	(4.6)	5.3	5.4	(5.4)	(5.4)	(5.3)^{N}	5.0	5.0^{N}	L	L					
22								L	4.9	5.0	5.2	[5.3]$^{c}_{N}$	5.4	[5.4]^{c}	[5.4]^{c}	5.1	(4.9)	L	L					
23							L	L	L	(5.2)	4.8	5.4^{N}	5.4	[5.7]$^{c}_{N}$	5.4	[5.3]^{c}	(4.9)	L	L					
24								A	L	L	L	(5.7)	(5.6)	(5.4)	(5.3)	(5.4)	L	A						
25							L	A	4.6	4.9	5.0^{N}	5.3	5.3	[5.3]^{c}	[5.4]^{c}	5.2	5.0	L						
26									L	(5.1)	5.0	(5.1)^{N}	5.8	(5.8)	[5.6]^{c}	[5.3]^{c}	4.9	L						
27								L	L	5.0	5.1^{N}	[5.3]^{c}	(5.4)	5.3	5.4	(5.0)^{N}	(5.0)^{N}	L						
28									4.8	4.9	(5.0)	5.8	5.3	[5.3]^{A}	[5.2]^{c}	(5.0)	5.0	L						
29									L	(4.8)^{N}	(5.2)	[5.3]^{c}	(5.3)^{N}	(5.0)	(5.2)^{N}	(5.0)	L	L						
30								L	L	5.2	5.0	5.3	5.2	(5.3)	(5.5)^{N}	5.0	5.0	L	L					
31								3.0^{K}	4.5^{K}	(5.3)$^{N}_{K}$	4.8^{K}	5.0^{K}	5.0^{K}	5.0^{K}	5.0^{K}	C^{K}	A^{K}	A^{K}	A^{K}					
Sum																								
Median								4.2	4.6	5.0	5.1	5.3	5.2	5.2	5.2	5.1	4.9	4.5						
Count								11	18	29	29	30	30	30	30	29	27	9						

TABLE 74
IONOSPHERE DATA-6

Washington, D.C. (Location) Ionosphere Station

National Bureau Of Standards (Institution)

Hourly values of $h'E$ in (km) for August (Month) 1946

Records measured by: A. K. B., J. L. S.

TIME: 75° W MERIDIAN

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1							C	110	110	110	110	110	110	110	110	110	110	110	110	110				
2							C	C	C	110	110	[110]^{B}	110	110	[110]^{B}	110	110	110	120	120				
3						120	110	110	110	110	110	110	110	110	110	110	110	110	110	C				
4						110	120	110	110	110	110	110	110	110	110	110	110	120	120	120				
5							110	110	110	110	110	110	110	110	110	110	110	110	110					
6							C	110	110	110	110	110	110	[110]^{C}	110	110	110	110	110					
7							110^{K}	120^{K}	110^{K}	110^{K}	110^{K}	110^{K}	110^{K}	110^{K}	110^{K}	100^{K}	110^{K}	120^{K}	C^{K}	C^{K}				
8							110	110	110	110	110	110	110	110	110	110	110	110	110					
9							110	110	110	110	110	110	100	100	110	110	110	110	100	C				
10							110	110	110	110	110	100	110	110	100	110	110	110	120					
11							110^{K}	(110)^{K}	110^{K}	110^{K}	110^{K}	110^{K}	110^{K}	110^{K}	110^{K}	110^{K}	100^{K}	120^{K}	110^{K}					
12							C^{K}	110^{K}	110^{K}	110^{K}	100^{K}	110^{K}	[110]$^{E}_{K}$	100^{K}	110^{K}	110^{K}	110^{K}	110^{K}	110^{K}	110^{K}				
13							110^{K}	110^{K}	110^{K}	[110]$^{C}_{K}$	[110]$^{B}_{K}$	(120)^{K}	[110]$^{B}_{K}$	100^{K}	110^{K}	100^{K}	110^{K}	110^{K}	110^{K}					
14							120^{K}	110^{K}	[110]$^{C}_{K}$	110^{K}	110^{K}	110^{K}	110^{K}	110^{K}	110^{K}	110^{K}	110^{K}	110^{K}	120					
15						C	120	110	110	110	110	110	110	110	100	110	110	110	110	C				
16							120^{K}	110^{K}	110^{K}	110^{K}	110^{K}	110^{K}	100^{K}	100^{K}	110^{K}	100^{K}	110^{K}	110^{K}	120^{K}	120^{K}				
17							110^{K}	110^{K}	110^{K}	110^{K}	110^{K}	110^{K}	100^{K}	110^{K}	110^{K}	110^{K}	110^{K}	100^{K}	110^{K}					
18							C	C	C	C	C	C	C	C	C	C	C	C	C					
19							C	C	C	100	110	110	110	110	110	[110]^{C}	110	110	110					
20							130^{H}	110	110	110	110	110	110	110	110	110	100	110	110					
21							[110]^{C}	110	110	110	110	110	110	110	110	110	110	110	110					
22							120	110	110	100	100	110	100	100	100	100	110	110	110					
23							110	110	110	110	110	110	110	110	110	110	110	110	120					
24							110	110	110	110	110	110	110	110	110	110	110	110	120					
25							[110]^{C}	110	110	110	100	110	100	[110]^{C}	[110]^{C}	110	[110]^{C}	110	110					
26							110	110	110	100	100	100	110	100	[110]^{C}	[110]^{C}	110	110	110					
27							110^{H}	110	110	110	110	110	110	100	100	100	110	110	120					
28							110	110	110	110	100	100	100	100	110	110	110	110	110					
29							120	110	110	110	110	110	110	110	110	110	110	110	100					
30							110^{H}	110	100	110	110	110	110	110	110	110	110	110	110					
31							110^{K}	120^{K}	110^{K}	110^{K}	110^{K}	110^{K}	110^{K}	100^{K}	100^{K}	[110]$^{C}_{K}$	110^{K}	110^{K}	110^{K}					
Sum																								
Median							110	110	110	110	110	110	110	110	110	110	110	110	110	120				
Count							25	28	28	30	30	30	30	30	30	30	30	30	29	5				

TABLE 75

IONOSPHERE DATA- 7

Washington, D.C. (Location) Ionosphere Station

National Bureau Of Standards (Institution)

Hourly values of f^0E in {Mc / kc} for August (Month) 1946

Records measured by: A.K.B. J.L.S.

TIME: 75°W MERIDIAN

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1							(2.1)	[2.7]^{A}	C	A	A	A	C	A	A	A	3.6	[3.2]^{A}	2.5	C				
2							C	C	C	A	(3.7)	A	C	B	B	C	[3.5]^{C}	(3.0)	2.6	C				
3						C	A	2.8	3.6	[3.7]^{A}	(3.8)	(3.8)	[3.9]^{C}	(3.8)	4.0	3.9	3.6	[3.1]^{C}	2.4	C				
4						C	(2.0)	2.7	3.4	(3.5)	(3.7)	[3.8]^{C}	[3.8]^{C}	(3.8)	(3.8)	[3.7]^{C}	(3.6)	(3.1)	2.4	C				
5							A	A	3.3	(3.6)	(3.7)	[3.9]^{A}	(4.0)	[4.0]^{C}	[3.8]^{A}	3.7	3.5	(3.1)	2.4					
6							C	2.7	3.2	[3.5]^{A}	(3.8)	(3.8)	[3.9]^{A}	[3.7]^{C}	3.7	[3.5]^{C}	[3.2]^{C}	(2.8)	C					
7							A^{K}	2.6^{K}	[3.6]$^{A}_{K}$	(3.5)^{K}	(3.7)^{K}	[3.8]$^{A}_{K}$	(3.9)^{K}	[3.8]$^{C}_{K}$	3.8^{K}	3.7^{K}	[3.5]$^{C}_{K}$	(2.9)^{K}	C^{K}	C^{K}				
8							2.2	(2.8)	3.3	3.6	[3.7]^{A}	(3.8)	[3.8]^{A}	3.7	[3.8]^{A}	3.7	3.5	3.0	(2.3)					
9							(2.0)	2.7	A	A	A	(3.7)	[3.8]^{A}	3.9	(3.8)	A	A	A	A	C				
10							(2.0)	2.9	3.1	3.3	A	A	A	A	A	A	3.4	2.9	A					
11							C^{K}	2.8^{K}	[3.1]$^{A}_{K}$	3.5^{K}	3.7^{K}	3.1^{K}	[3.8]$^{A}_{K}$	3.8^{K}	[3.8]$^{A}_{K}$	[3.7]$^{A}_{K}$	3.3^{K}	(2.7)^{K}	C^{K}					
12							C^{K}	A^{K}	A^{K}	A^{K}	[3.5]$^{A}_{K}$	[3.5]$^{B}_{K}$	(3.8)^{K}	3.8^{K}	(3.7)^{K}	[3.6]$^{A}_{K}$	[3.3]$^{K}_{K}$	(2.8)^{K}	C^{K}	C^{K}				
13							C^{K}	C^{K}	A^{K}	C^{K}	B^{K}	3.7^{K}	(3.7)^{K}	4.0^{K}	[3.8]$^{A}_{K}$	3.5^{K}	(3.4)^{K}	2.8^{K}	(2.1)^{K}					
14							A^{K}	2.7^{K}	[3.1]$^{C}_{K}$	[3.5]$^{C}_{K}$		3.8^{K}	[3.9]$^{C}_{K}$	3.7^{K}	3.7^{K}	[3.5]$^{C}_{K}$	[3.3]$^{A}_{K}$	3.0^{K}	2.3					
15						C	A	(2.8)	3.0	3.2	A	C	C	B	(3.7)	(3.5)	(3.2)	2.9	2.2	1.6				
16							(2.0)^{K}	2.6^{K}	(3.0)^{K}	3.3^{K}	3.6^{K}	[3.7]$^{C}_{K}$	(3.8)^{K}	[3.8]$^{A}_{K}$	(3.7)^{K}	(3.6)^{K}	3.3^{K}	(3.0)^{K}	2.4	(1.6)^{K}				
17							(2.0)^{K}	2.6^{K}	2.8^{K}	(3.4)^{K}	[3.7]$^{C}_{K}$	(3.8)^{K}	[3.8]$^{C}_{K}$	[3.8]$^{C}_{K}$	3.7^{K}	3.6^{K}	3.4^{K}	2.9^{K}	A^{K}					
18							C	C	C	C	C	C	C	C	C	C	C	C	C	C				
19							C	C	C	A	A	A	A	A	A	C	A	A	A					
20							2.2^{H}	(2.7)^{H}	(3.0)^{H}	[3.2]^{C}	[3.5]^{A}	3.9	(3.9)	3.8	[3.7]^{C}	3.6	3.3	2.8	(2.2)					
21							[2.0]^{A}	[2.5]^{A}	[2.9]^{A}	[3.5]^{A}	3.7	[3.8]^{A}	4.0	3.9	3.8	3.6	[3.3]^{A}	(2.8)	2.3					
22							A	A	A	3.6	3.8	[3.9]^{A}	[4.0]^{A}	[3.9]^{A}	(3.8)	3.6	3.2	A	A					
23							1.9	[2.8]^{A}	[3.2]^{A}	[3.4]^{A}	(3.6)	(3.7)	[3.8]^{C}	3.8	3.8	[3.6]^{A}	3.3	[2.8]^{A}	2.3					
24							A	A	A	A	A	(3.8)	[3.9]^{A}	[3.8]^{A}	3.8	(3.7)	3.3	2.8	A					
25							A	A	A	A	3.7	(3.8)	(3.8)	[3.9]^{C}	[3.8]^{C}	[3.6]^{A}	(3.4)	2.8	A					
26							A	2.7	3.0	[3.3]^{C}	[3.6]^{C}	[3.4]^{C}	[4.0]^{A}	(3.7)	[3.8]^{C}	[3.6]^{C}	3.3	2.8	2.2					
27							(1.9)^{H}	2.7	(3.2)	3.5	(3.7)	[3.8]^{C}	(3.8)	3.9	3.7	(3.5)	3.2	2.9	A					
28							A	A	2.9	[3.2]^{A}	(3.4)	[3.5]^{A}	(3.5)	3.7	3.6	3.5	3.1	A	A					
29							1.8	A	A	A	3.7	[3.8]^{C}	3.8	(3.8)	3.7	3.6	[3.3]^{C}	[2.7]^{C}	2.3					
30							1.7^{H}	[2.5]^{A}	[3.1]^{A}	(3.5)	3.7	[3.8]^{A}	[3.8]^{C}	3.7	3.6	3.6	3.2	2.8	(2.0)					
31							(1.9)^{K}	(2.5)^{K}	3.1^{K}	[3.3]$^{A}_{K}$	[3.5]$^{A}_{K}$	[3.7]$^{A}_{K}$	[3.8]$^{C}_{K}$	[3.8]$^{C}_{K}$	3.7^{K}	[3.5]$^{C}_{K}$	[3.1]$^{C}_{K}$	2.6^{K}	A^{K}					
Sum																								
Median							(2.0)	2.7	3.1	(3.5)	(3.7)	(3.8)	(3.8)	(3.8)	3.8	(3.6)	3.3	2.8	2.3					
Count						0	14	20	20	21	23	25	25	25	26	25	28	26	16	2				

TABLE 76

IONOSPHERE DATA - 8

Washington, D.C. Ionosphere Station
(Location)

National Bureau Of Standards
(Institution)

Hourly values of E_s in {Mc / km} for August (Month) 1946

Records measured by: A. K. B.
J. L. S.

TIME: 75° W MERIDIAN

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1		15/130	32/120	38/120	43/120	37/110	38/100	36/110	64/110	80/110	39/110	39/110	52/100	38/110	39/110	40/110		38/100	37/110	16/100	15/110		43/110	30/110
2	45/110	44/110	38/110	C	C	C	C	C	72/110	68/110	52/100	40/110			42/140	40/130	52/130	40/120	34/110	36/110		23/120	47/120	47/110
3	48/110	38/110	32/110	35/110	43/120	28/120	53/110	51/110	51/120	40/110				68/120	47/130			36/120	37/120	27/110				29/110
4	29/100	23/100					31/120	44/120	38/120	49/110	52/110	41/110		39/110			68/110	37/130	38/120	45/110	37/110		24/110	29/110
5		14/110					29/120	40/110	39/120	50/110	53/110	51/110	43/130		38/110	44/120	52/120	49/120	63/110	(30)/120	29/110	35/110	48/110	43/110
6	30/110	25/110	53/110	60/110	53/100	41/110	66/100	53/120	50/110	39/110	42/110	40/110	42/120	42/110	40/110					18/130		29/110	31/110	48/110
7	48/110	38/110	31/110	52/110	41/110		39/110	50/110	38/110	40/120	38/110	40/110				38/130			27/120		35/110	45/110	29/110	24/110
8	14/110		24/100	13/110		38/120	29/110	39/120	39/120	38/120	40/110	42/120	53/120	50/110	42/110	54/120	57/120	86/110	57/110	47/120	65/110	48/120	53/110	53/110
9	82/110	45/100	29/110	35/110	30/100	38/110	41/110	53/110	66/110	113/110	52/110	53/110	52/110		51/110	51/100	57/100	52/110	51/100	51/110	66/110	37/110	35/110	
10	29/110	29/110		14/100			42/100	43/120	66/110	76/110	66/110	53/110	57/110	64/100	55/110	50/110	54/120	68/120	35/120	70/110	53/110	37/110	37/100	
11	28/100					15/120	34/110	29/110	42/110	40/110	68/120		50/110	40/110	53/110	50/110	53/110	53/120	53/110	53/110		29/110		25/100
12	29/120		29/110	39/110	42/110	39/110	52/110	53/110	52/110	50/110	38/110			42/110	40/110	50/120				45/110	38/110	53/100	42/110	
13			13/110				52/110	39/110	64/110	35/100	53/110	39/160			39/120	37/130		34/120	53/110	86/110	35/110	45/110	55/110	42/110
14	40/110	33/110	50/110	41/110	39/110	74/110	24/120	39/110	C					41/130	41/110	41/110	38/110		35/110	37/110	28/110			
15		27/110	38/110			24/110	45/110		37/110	41/110	53/110	44/110							28/130					
16						29/110		29/100	35/100	52/110	39/110		38/110	40/110	39/120		37/120		24/100	24/120	24/110	60/110	38/110	45/110
17	29/100	12/110	16/110	16/110	27/110	29/100	29/110	30/120	37/110	38/120	40/140	38/110			38/140		38/130	50/130	43/110	35/110	35/110	42/110	27/110	23/110
18		28/110	30/110	C	C	C	C	C	C	C	C	C.	C	C	C	C	C	C	C	C	C	C	C	C
19	C	C	C	C	C	C	C	C	C	53/110	53/110	50/110	50/110	40/110	37/110	C	37/110	42/110	53/110	57/110	32/110	35/110	24/110	23/120
20	24/110	26/110		23/110			38/120	39/110	53/130	39/110	37/110	39/110	40/120			38/120	35/130	43/110	24/100	28/120	35/110	28/110	35/110	36/110
21	37/110	29/110			24/110		45/110	44/110	47/110	42/110	42/110	50/100		39/110	40/110	40/110	37/120	38/120	21/120	15/110	39/110	35/110	24/110	27/110
22	53/110	30/110	26/110	27/110			37/110	50/110	50/110	45/110	40/110	42/130	41/100	40/100	44/110	52/120	52/120	40/120	24/110	24/110	C	C	C	C
23	C	30/110		24/110	28/110	23/110	52/110	45/110	52/110	44/110	38/110				40/110	38/110	35/130	38/120	25/110	18/130		20/110	34/110	28/110
24	27/110	35/110	31/110	22/100		27/110	55/110	66/110	57/110	66/110	55/110	41/110	41/120	39/110	38/110	52/120	50/120	57/120	25/110	66/110	56/110	23/110	33/110	27/110
25	35/110	C	C	26/110	36/110	47/110	50/110	52/110	51/110	53/110	39/120	C		C	C	37/120		31/120	26/110		24/110	30/110	23/110	29/110
26	28/110	23/110	27/110	33/110	46/100	49/100	38/110		34/120	38/110	41/110	40/120	45/120	38/120	C	34/110	43/110	34/110	28/110	29/110	33/110	55/110	29/110	23/110
27	23/100	23/100	23/100	23/100	23/110	27/110	28/100	37(130)	38/100	42/120	39/110	40/120		52/110	38/120			31/120	35/110	27/110	35/110	23/110	27/110	23/100
28		26/110	23/110	24/110	38/100	23/120	38/110	53/110	50/110	41/110	38/120	52/110	58/110	57/110	56/110	53/110	50/110	40/110	29/110	31/110		42/110	43/100	43/110
29	32/110	26/110	30/100	37/110	23/100	38/130	29/110	40/110	50/110 H	38/110	39/110				38/130	38/120	38/110		30/100	36/100	23/100	23/100	23/100	30/100
30	35/110	43/100	27/100	31/110	38/110	38/100	29/100	41/110	39/110	38/130		39/110	38/120	38/120		50/100	37/130	40/110	32/120			27/110		22/140
31	36/120	23/140					24/140	37/120	32/120	38/110	38/110	40/110		42/120	42/120	C	57/110	78/110	60/110	45/110	31/110	38/110	50/100	31/100
Sum																								
Median	2.9	2.6	2.6	2.4	2.4	2.7	3.8	4.0	5.0	4.2	4.0	4.0	3.8	3.9	4.0	3.9	3.8	3.8	3.4	3.0	3.1	3.0	3.1	2.8
Count	29	29	29	28	28	28	28	28	28	30	30	29	30	29	28	28	30	30	30	30	29	29	29	29

TABLE 77

IONOSPHERE DATA - 9

Washington, D.C. (Location) Ionosphere Station

National Bureau Of Standards (Institution)

Hourly values of F2-M1500 for August (Month) 1946

Records measured by: A.K.B. J.L.S.

TIME: 75° W MERIDIAN

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	(1.9)	(1.8)^{J}	1.8	1.8	1.7^{F}	1.9	1.9	1.7	1.9	(1.9)^{J}	(2.0)	1.8	1.8	1.7	1.8	1.8	1.8	1.8	1.9	(2.1)	(1.8)	(1.8)	1.8	(1.8)^{J}
2	1.8	(1.8)^{J}	1.7	C	C	C	C	C	C	1.7	(1.8)^{J}	1.5	(1.9)	(1.7)	1.8	1.8	1.8	C	1.9	(2.1)	1.9	1.8	(1.8)	(1.8)
3	(1.8)^{J}	1.8	(1.8)	(2.0)	(1.8)	(1.9)^{J}	2.0	2.0	(1.7)^{H}	(1.9)	(1.9)	(1.9)	C	(1.7)	1.7	1.7	1.7	1.9	1.9	(2.2)^{J}	(1.8)^{J}	(1.8)	(1.8)	(1.7)^{J}
4	(1.9)^{F}	1.8^{F}	1.7^{F}	(1.8)^{F}	1.8^{F}	2.0^{F}	(2.2)	2.1	2.0	1.8	1.9	1.8	1.9	1.8	1.8	1.8	1.7	1.8	1.9	1.9	(1.8)	(1.9)	1.9	(1.8)
5	1.8	1.8	1.9	(2.0)^{J}	1.8	1.8	2.0	(2.2)	(2.2)	1.9	1.7	1.7	1.8	1.8	1.7	(1.8)	1.9	1.8	1.9	(1.9)	(1.9)	(1.8)^{J}	(1.9)^{J}	(1.8)^{J}
6	(1.8)^{J}	1.9	1.9^{F}	1.9^{F}	1.8^{F}	1.8^{F}	1.9	1.9	1.8	1.8	1.8	1.9	1.7	C	1.8	1.7	1.8	(1.9)	(1.9)^{J}	(2.0)^{J}	(2.0)^{J}	(1.8)^{J}	(1.8)	(1.8)
7	1.7	1.6	1.8^{K}	1.8^{K}	1.7^{K}	1.8^{K}	1.6^{K}	1.7^{K}	1.7^{K}	1.9^{K}	G^{K}	C^{K}	1.6^{K}	C^{K}	C^{K}	1.7^{K}	1.7^{K}	(1.8)$^{J}_{K}$	1.9^{K}	(1.9)^{K}	1.8^{K}	1.8^{K}	1.8^{M}	1.8^{K}
8	(1.8)^{K}	1.8^{K}	1.8^{K}	1.9^{K}	1.9^{K}	(2.1)^{K}	(2.4)^{J}	(2.1)	(2.0)	2.1	1.8	1.9	1.8	1.8	1.8	1.8	1.8	A	(1.9)	(2.1)	A	(2.0)	1.9	1.8
9	A	(1.9)^{J}	(1.9)	1.8	(1.8)	1.9	1.9	(2.1)^{J}	2.1	2.1	1.9	2.0	1.9	1.8	1.9	1.9	1.9	2.0	1.9	(1.9)	(1.9)	(2.0)^{J}	1.8	(1.8)^{J}
10	1.8	(1.9)	1.9	(1.9)^{J}	1.9	2.0	2.2	2.1	1.9	1.8	2.0	1.9	2.0	(2.0)	1.8	1.8	1.9	1.9	1.9	(1.9)	1.9	(1.9)	1.8	(1.8)^{J}
11	1.8	(1.7)^{J}	1.6	1.7	1.8^{K}	1.8^{K}	1.9^{K}	1.6^{K}	(1.5)^{K}	(1.8)$^{J}_{K}$	G^{K}	1.$^{H}_{K}$	C^{K}	1.6^{K}	C^{K}	1.6^{K}	1.8^{K}	1.6^{K}	(1.9)$^{J}_{K}$	(2.0)^{K}	1.8^{K}	1.9^{K}	(1.9)$^{J}_{K}$	1.8^{K}
12	1.9^{K}	1.9^{K}	1.9^{K}	1.7^{K}	1.8^{K}	1.9^{K}	2.0^{K}	1.8^{K}	(1.8)^{K}	(1.8)^{K}	(1.9)$^{J}_{K}$	1.9^{K}	(1.7)^{K}	1.7^{K}	1.8^{K}	1.8^{K}	1.8^{K}	(1.8)^{K}	(1.9)^{K}	2.0^{K}	(1.9)^{K}	(2.0)$^{J}_{K}$	1.9$^{F}_{K}$	(1.9)$^{F}_{K}$
13	1.9$^{F}_{K}$	1.7$^{F}_{K}$	(1.7)$^{F}_{K}$	C^{K}	C^{K}	C^{K}	2.1^{K}	1.9^{K}	(1.7)^{K}	C^{K}	G^{K}	C^{K}	(1.9)^{K}	1.6^{K}	(1.8)^{K}	(1.8)^{K}	1.9^{K}	1.9^{K}	2.0^{K}	A^{K}	(1.9)$^{J}_{K}$	(2.0)^{K}	(1.8)^{K}	(1.7)^{K}
14	1.7^{K}	1.8$^{F}_{K}$	1.6$^{F}_{K}$	1.7^{K}	1.8$^{F}_{K}$	1.8$^{F}_{K}$	1.9$^{F}_{K}$	(1.9)^{K}	C^{K}	C^{K}	2.0^{K}	C^{K}	C^{K}	C^{K}	1.7^{K}	(1.7)^{K}	1.6^{K}	1.8^{K}	1.8	(2.0)^{J}	1.8	(1.8)	1.8	(1.8)
15	(1.7)	(1.7)	1.8	1.9	1.9	1.9	2.0	1.9	2.1	(2.1)	1.9	(1.9)	1.9	1.7	1.7	1.9	1.8	1.8	2.0	(2.0)^{J}	2.0	(1.7)^{J}	(1.6)	1.8
16	1.8	(1.9)	1.7	1.7	(1.8)^{J}	(1.8)	2.0^{K}	1.9^{K}	1.9^{K}	2.0^{K}	1.7^{K}	1.8^{K}	1.7^{K}	1.8^{K}	1.8^{K}	1.7^{K}	1.7^{K}	1.8^{K}	1.9^{K}	(1.9)^{K}	1.9^{K}	(2.0)^{K}	(2.0)^{K}	1.8^{K}
17	1.7^{K}	1.7^{K}	1.7$^{F}_{K}$	(1.8)$^{F}_{K}$	(1.6)^{K}	1.8$^{F}_{K}$	1.9^{K}	1.9^{K}	1.9^{K}	1.5^{K}	(1.5)^{K}	1.5^{K}	1.6^{K}	1.6^{K}	1.6^{K}	1.7^{K}	1.7^{K}	1.8^{K}	1.9^{K}	(2.0)^{K}	(1.9)^{K}	(1.8)^{K}	(1.8)	(1.8)
18	(1.8)^{J}	(1.8)	1.8^{F}	C											C									C
19	C	C	C	C	C	C	C	C	C	2.0	1.9	1.9	1.7	1.8	1.8	C	1.8	(1.9)	(2.0)	(2.0)	1.9	(1.9)^{J}	(1.9)	(1.8)
20	1.8	1.8	1.8	1.9	1.9	1.9	2.0	2.1	2.0	2.0	2.0	(2.0)^{J}	1.9	1.8	1.8	1.9	1.8	(1.9)	1.9	2.0	(1.9)	(1.9)	(1.9)	C
21	1.9	1.8	1.9	1.9	1.9	2.0	2.2	2.2	(2.1)^{J}	(2.0)	2.0	1.9	1.8	1.9	1.9	1.8	1.9	1.9	(2.0)	(1.9)	C	(1.8)	(1.9)^{J}	(1.9)^{J}
22	C	1.9	1.9	1.9	1.9	1.9	(2.1)	C	2.1	2.1	2.0	1.8	1.9	(1.8)	1.8	1.9	1.9	1.9	C	C	1.9	C	C	C
23	C	1.9	1.9	2.0	1.9	C	2.2	2.2	2.1	2.0	(1.9)^{J}	1.8	1.8	1.8	(1.9)	C	1.9	(1.9)	C	C	C	C	C	(2.0)
24	(1.9)	(1.8)	1.8	1.8	1.8	1.8	2.1	2.1	2.1	1.9	1.8	1.8	(1.8)	1.9	(1.8)	1.8	1.8	1.9	1.8	1.8	(1.9)	1.8	C	1.7
25	(1.8)	C	C	C	(1.8)	(1.9)	1.9	1.9	1.9	1.8	1.9	1.7	1.8	C	C	1.8	1.8	1.9	1.9	1.8	1.9	1.9	1.9	(1.9)
26	1.8	1.9	1.8	1.9	1.8	1.8	(2.1)	2.0	2.2	2.1	2.0	1.9	1.9	1.9	C	C	1.9	1.9	1.9	(2.0)	2.0	(2.0)^{J}	(2.0)	1.9
27	1.8	1.7	1.7	1.7	1.9	2.0	2.0	2.1	2.0	(2.0)	2.0	C	1.9	1.8	1.8	1.8	1.9	(1.9)	2.0	2.0	(1.9)	(1.9)	1.9	1.8
28	1.8	1.8	1.8	1.8	1.8	(1.9)	2.0	2.1	1.8	2.0	1.9	1.8	1.9	1.8	1.8	1.8	1.9	1.9	1.9	(2.0)^{J}	C	C	(1.9)	(1.9)
29	(1.9)	(1.9)	2.0	1.9	2.0	2.0	(2.2)	C	2.1	2.1	C	(2.1)	1.9	(1.9)	2.0	1.8	(1.9)	1.9	(2.1)	(2.1)	(2.0)	(2.0)	(1.9)	(1.8)
30	(1.9)	1.9	2.0	1.9	1.9	1.9	2.2	2.1	2.1	2.0	2.1	(2.1)	(1.9)	1.8	1.9	1.8	1.8	(1.9)	(1.9)	C	C	C	C	(1.7)
31	1.6^{K}	1.5$^{F}_{K}$	(1.6)$^{F}_{K}$	(1.7)$^{F}_{K}$	(1.8)$^{F}_{K}$	2.1^{K}	1.9^{K}	1.9^{K}	(1.7)^{K}	(1.8)^{K}	(1.6)^{K}	(1.8)^{K}	(1.7)^{K}	1.6^{K}	1.6^{K}	C^{K}	(1.8)$^{J}_{K}$	A^{K}	1.9^{K}	1.8^{K}	1.8^{K}	1.8^{K}	(1.9)^{K}	1.8^{K}
Sum																								
Median	1.8	1.8	1.8	1.8	1.8	1.9	2.0	2.0	2.0	2.0	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	(2.0)	(1.9)	(1.9)	(1.9)	(1.8)
Count	27	29	29	26	27	26	28	26	27	28	29	26	27	26	26	26	30	27	28	26	26	26	26	28

TABLE 78

IONOSPHERE DATA- 10

Washington, D. C. Ionosphere Station
(Location)

National Bureau Of Standards
(Institution)

Hourly values of F2-M3000 for August (Month) 1946

Records measured by: A.K.B. J.L.S.

TIME: 75° W MERIDIAN

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	(2.8)	(2.8)^{J}	2.8	2.7	2.7^{F}	2.8	2.9	2.7	2.8	(2.9)^{J}	(3.0)	2.8	2.7	2.6	2.8	2.7	2.8	2.7	2.9	(3.1)	(2.7)	(2.7)	2.8	(2.7)^{J}
2	2.8	(2.8)^{J}	2.6	C	C	C	C	C	C	2.7	(2.7)^{J}	2.3	(2.9)	(2.6)	2.7	2.7	2.7	C	2.9	(3.1)	2.8	2.7	(2.7)	(2.7)
3	(2.7)^{J}	2.7	(2.8)	(3.0)	(2.7)	(2.8)^{J}	2.9	2.9	(2.6)^{H}	(2.9)	(2.9)	(2.9)	C	(2.6)	2.6	2.6	2.7	2.8	2.9	(3.2)^{J}	(2.8)^{J}	(2.8)	(2.8)	(2.7)^{J}
4	(2.9)^{F}	2.8^{F}	2.6^{F}	(2.7)^{F}	2.7^{F}	3.0^{F}	(3.2)	3.1	3.0	2.8	2.9	2.8	2.8	2.7	2.7	2.8	2.6	2.8	2.8	2.9	(2.8)	(2.8)	2.9	2.7
5	2.8	2.7	2.8	(3.0)^{J}	2.8	2.8	3.0	(3.2)	(3.2)	2.8	2.6	2.6	2.7	2.7	2.8	(2.8)	2.8	2.8	2.9	(2.8)	(2.9)	(2.7)^{J}	(2.8)^{J}	(2.8)^{J}
6	(2.7)^{J}	2.8	2.9^{F}	2.8^{F}	2.7^{F}	2.7^{F}	2.9	2.9	2.7	2.7	2.7	2.8	2.6	C	2.8	2.7	2.8	(2.8)	(2.8)^{J}	(2.9)^{J}	(3.0)^{J}	(2.8)^{J}	(2.7)	(2.7)
7	2.6	2.5	2.7^{K}	2.8^{K}	2.6^{K}	2.7^{K}	2.5^{K}	2.6^{K}	2.7^{K}	2.9^{K}	G^{K}	C^{K}	2.5^{K}	C^{K}	C^{K}	2.6^{K}	2.5^{K}	(2.8)$^{J}_{K}$	2.8^{K}	(2.8)^{K}	2.7^{K}	2.7^{K}	2.7^{K}	2.7^{K}
8	(2.8)^{K}	2.6^{K}	2.7^{K}	2.7^{K}	2.8^{K}	(3.0)^{K}	(3.5)^{J}	(3.1)	(3.0)	3.1	2.8	2.9	2.7	2.7	2.7	2.7	2.7	A	(2.9)	(3.1)	A	(3.0)	2.9	2.8
9	A	(2.9)^{J}	(2.9)	2.7	(2.8)	2.9	2.8	(3.2)^{J}	3.1	3.0	2.9	3.0	2.8	2.7	2.8	2.9	2.8	2.9	2.8	(2.9)	(2.9)	(3.0)^{J}	2.8	(2.8)^{J}
10	2.8	(2.9)	2.9	(2.9)^{J}	2.9	3.0	3.2	3.1	2.9	2.8	2.9	2.8	2.9	(3.0)	2.8	2.8	3.8	2.9	2.8	(2.9)	2.9	(2.9)	2.7	(2.8)^{J}
11	2.7	(2.6)^{J}	2.5	2.5	2.7^{K}	2.7^{K}	2.9^{K}	2.4^{K}	(2.3)^{K}	(2.8)$^{J}_{K}$	G^{K}	2.6$^{H}_{K}$	C^{K}	2.5^{K}	C^{K}	2.5^{K}	2.7^{K}	(2.5)$^{J}_{K}$	(2.8)$^{J}_{K}$	(3.0)^{K}	2.7^{K}	2.8^{K}	(2.9)$^{J}_{K}$	2.8^{K}
12	2.8^{K}	2.9^{K}	2.9^{K}	2.5^{K}	2.8^{K}	2.8^{K}	2.9^{K}	2.8^{K}	(2.7)^{K}	(2.8)^{K}	(2.8)$^{J}_{K}$	2.8^{K}	(2.6)^{K}	2.6^{K}	2.7^{K}	2.8^{K}	2.7^{K}	(2.8)^{K}	(2.9)^{K}	2.9^{K}	(2.9)^{K}	(3.0)$^{J}_{K}$	2.9$^{F}_{K}$	(2.9)$^{F}_{K}$
13	2.8$^{F}_{K}$	2.7$^{F}_{K}$	(2.6)$^{F}_{K}$	C^{K}	C^{K}	C^{K}	3.1^{K}	2.9^{K}	(2.6)^{K}	C^{K}	G^{K}	C^{K}	(2.8)^{K}	2.6^{K}	(2.7)^{K}	(2.8)^{K}	2.9^{K}	2.8^{K}	3.0^{K}	A^{K}	(2.9)$^{J}_{K}$	(3.0)^{K}	(2.8)^{K}	(2.6)^{K}
14	2.6^{K}	2.7$^{F}_{K}$	2.6$^{F}_{K}$	2.6^{K}	2.8$^{F}_{K}$	2.8$^{F}_{K}$	2.9$^{F}_{K}$	(2.7)^{K}	C^{K}	C^{K}	3.0^{K}	C^{K}	C^{K}	C^{K}	2.6^{K}	(2.7)^{K}	2.5^{K}	2.7^{K}	2.8	(2.9)^{J}	2.8	(2.8)	2.7	(2.7)
15	(2.6)	(2.6)	2.7	2.8	2.9	2.8	3.0	2.9	3.1	(3.1)	2.9	(2.8)	2.8	2.6	2.7	2.8	2.7	2.7	2.9	(3.0)^{J}	3.0	(2.6)^{J}	(2.5)	2.7
16	2.7	(2.8)	2.6	2.6	(2.7)^{J}	(2.8)	2.9^{K}	2.9^{K}	2.8^{K}	3.0^{K}	2.6^{K}	2.7^{K}	2.7^{K}	2.7^{K}	2.7^{K}	2.6^{K}	2.6^{K}	2.7^{K}	2.8^{K}	(2.9)^{K}	2.8^{K}	(2.9)^{K}	(3.0)^{K}	2.8^{K}
17	2.5^{K}	2.7^{K}	2.6$^{F}_{K}$	(2.7)$^{F}_{K}$	(2.5)^{K}	2.8$^{F}_{K}$	2.9^{K}	2.9^{K}	2.9^{K}	2.3^{K}	(2.3)^{K}	2.3^{K}	2.4^{K}	2.5^{K}	2.5^{K}	2.6^{K}	2.6^{K}	2.8^{K}	2.9^{K}	(3.0)^{K}	(2.9)^{K}	(2.8)^{K}	(2.7)	(2.8)
18	(2.8)^{J}	(2.7)^{F}	2.8^{F}	C																				C
19	C	C	C	C	C	C	C	C	C	3.0	2.8	2.8	2.5	2.7	2.8	C	2.8	(2.9)	(2.9)	(3.0)	2.9	(2.8)^{J}	(2.8)	(2.8)
20	2.8	2.7	2.7	2.8	2.8	2.8	3.0	3.1	3.0	3.0	3.0	(3.0)^{J}	2.8	2.8	2.8	2.8	2.8	(2.9)	2.9	3.0	(2.8)	(2.9)	(2.8)	C
21	2.8	2.8	2.9	2.9	2.9	2.9	3.2	3.2	(3.2)^{J}	(3.0)	3.1	2.9	2.8	2.8	2.8	2.8	2.8	2.9	(3.0)	(2.9)	C	(2.8)	(2.8)^{J}	(2.8)^{J}
22	C	2.8	2.8	2.9	2.8	2.9	(3.2)	C	3.1	3.1	3.0	2.8	2.8	(2.8)	2.7	2.8	2.8	2.9	C	C	2.8	C	C	C
23	C	2.8	2.9	2.9	2.8	C	3.3	3.2	3.1	3.0	(2.9)^{J}	2.8	2.8	2.8	(2.8)	C	2.8	(2.8)	C	C	C	C.	C	(3.0)
24	(2.9)	(2.8)	2.7	2.7	2.7	2.8	3.1	3.0	3.1	2.9	2.8	2.7	(2.8)	2.8	(2.8)	2.8	2.8	2.8	2.8	2.8	(2.9)	2.8	C	2.6
25	(2.7)	C	C.	C	(2.7)	(2.8)	2.9	2.8	2.9	2.7	2.8	2.6	2.7	C.	C	2.8	2.7	2.8	2.8	2.8	2.8	2.8^{K}	2.9	(2.8)
26	2.8	2.9	2.8	2.9	2.7	2.8	(3.1)	2.9	3.3	3.1	3.0	2.9	2.8	2.8	C	C.	2.8	2.9	2.9	(3.0)	2.9	(3.0)^{J}	(3.0)	2.8
27	2.7	2.6	2.6	2.6	2.8	2.9	3.0	3.2	3.0	(3.0)	2.9	C	2.8	2.8	2.7	2.7	2.8	(2.8)	3.0	(3.0)	(2.8)	(2.9)	2.8	2.8
28	2.8	2.7	2.8	2.8	2.7	(2.9)	3.0	3.1	2.8	3.0	2.8	2.7	2.8	2.8	2.7	2.8	2.8	2.9	2.8	(3.0)^{J}	C	C	(2.8)	(2.9)
29	(2.8)	(2.9)	3.0	2.8	2.9	3.0	(3.2)	C	3.2	3.2	C	(3.1)	2.8	(2.8)	2.9	2.8	(2.8)	2.9	(3.0)	(3.1)	(2.9)	(2.7)	(2.9)	(2.8)
30	(2.9)	2.9	3.0	2.8	2.8	2.9	3.2	3.1	3.1	3.0	3.1	(3.1)	(2.9)	2.8	2.8	2.7	2.8	(2.9)	(2.9)	C	C	.	C	(2.7)
31	2.4^{K}	2.3$^{F}_{K}$	(2.4)$^{F}_{K}$	(2.6)$^{F}_{K}$	(2.8)$^{F}_{K}$	3.1^{K}	2.9^{K}	2.8^{K}	(2.6)^{K}	(2.7)^{K}	(2.5)^{K}	(2.7)^{K}	(2.6)^{K}	2.4^{K}	2.5^{K}	C^{K}	(2.7)$^{J}_{K}$	A^{K}	2.8^{K}	2.8^{K}	2.8^{K}	2.7^{K}	(2.9)$^{J}_{K}$	2.7^{K}
Sum																								
Median	2.8	2.8	2.8	2.8	2.8	2.8	3.0	2.9	3.0	3.0	2.8	2.8	2.8	2.7	2.7	2.8	2.8	2.8	2.9	(3.0)	(2.8)	(2.8)	(2.8)	(2.8)
Count	27	29	29	26	27	26	28	26	27	28	29	26	27	26	26	26	30	27	28	26	25	26	26	28

TABLE 79

IONOSPHERE DATA- II

Washington, D.C. (Location) Ionosphere Station

National Bureau Of Standards (Institution)

Hourly values of F1-M3000 for August (Month) 1946

Records measured by: A. K. B. J. L. S.

TIME: 75° W MERIDIAN

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1							L	3.5	3.4	3.6^{H}	C	3.7	3.7	(3.4)	(3.7)	$(3.3)^{H}$	3.4^{H}	L	L					
2							C	C	C	3.3	3.6^{H}	3.5^{H}	3.7	3.6	(3.3)	$(3.2)^{H}$	3.4	C	L					
3							L	(3.1)	$(3.5)^{H}$	$(3.6)^{H}$	3.9	C	$(3.8)^{H}$	3.6	3.4	3.3	(3.5)	L	L					
4							L	L	L	(3.5)	(3.6)	(3.5)	$(3.7)^{H}$	3.9	3.7^{H}	3.8^{H}	(3.7)	L	L					
5								L	3.8	3.6	(3.4)	3.5	(3.4)	3.5	3.8	3.4	A	(3.3)	L					
6							L	(3.5)	(3.5)	3.5	3.6	3.4	(3.5)	C	3.4	3.5^{H}	3.3	3.4	L					
7							L^{K}	$(3.4)^{K}$	3.3^{K}	3.3^{H}_{K}	$(3.9)^{K}$	3.8^{H}	3.7^{K}	$(3.6)^{K}$	3.4^{K}	3.5^{K}	3.3^{K}	3.4^{A}_{K}	L^{K}					
8								L	L	3.5	3.7	3.7^{H}	3.5	3.8	3.8	3.4	3.4^{H}	A	L					
9								L	A	A	3.5	(3.4)	(3.7)	3.3^{H}	3.5	3.6	A	A	A					
10								L	A	(3.6)	3.5	3.5	A	(3.6)	(3.5)	L	3.4	L	L					
11								3.3^{K}	3.3^{K}	3.6^{K}	3.6^{K}	3.8^{H}_{K}	3.6^{K}	3.5^{K}	A^{K}	3.5^{K}	3.4^{K}	3.3^{K}	L^{K}					
12								$(3.4)^{K}$	$(3.4)^{K}$	3.5^{K}	3.7^{H}_{K}	3.8^{H}_{K}	3.5^{H}_{K}	3.7^{K}	3.6^{K}	3.5^{K}	3.4^{K}	3.4^{K}	L^{K}					
13								3.3^{K}	$(3.5)^{K}$	C^{K}	$(3.6)^{K}$	$(3.4)^{K}$	3.7^{K}	3.5^{K}	$(3.7)^{K}$	3.5^{K}	3.5^{K}	3.3^{K}	L^{K}					
14							L^{K}	3.3^{K}	C^{K}	$(3.4)^{K}$	3.7^{H}_{K}	$(3.5)^{H}_{K}$	3.7^{K}	3.6^{H}_{K}	3.5^{K}	$(3.3)^{K}$	3.2^{K}	L^{K}	L					
15								L	3.6	3.5^{H}	A	C	3.5	(3.3)	3.3	3.3	3.3	L	L					
16								3.3^{K}	3.4^{K}	3.5^{H}_{K}	3.7^{H}_{K}	3.6^{H}_{K}	3.6^{H}_{K}	3.4^{K}	3.5^{K}	3.4^{K}	3.2^{K}	$(3.4)^{K}$	L^{K}					
17								$(3.1)^{K}$	3.4^{K}	3.5^{K}	3.7^{K}	3.7^{H}_{K}	3.7^{H}_{K}	3.6^{H}_{K}	3.5^{K}	3.5^{K}	3.4^{K}	3.4^{K}	A^{K}					
18							C						C						C					
19							C	C	C	3.6	3.6	3.9^{H}	3.5^{H}	3.6	3.6	C	(3.3)	L						
20								L	(3.4)	3.5	3.5	3.4	(3.6)	3.4	(3.4)	(3.5)	L	(3.4)	L					
21									L	(3.9)	3.5	3.4	(3.6)	(3.5)	$(3.5)^{H}$	3.5	3.5^{H}	L	L					
22								L	3.5	3.7	3.6	C	3.5	C	C	3.6	(3.7)	L	L					
23							L	L	L	(3.6)	3.7	3.7^{H}	3.6	C H	3.4	C	(3.5)	L	L					
24								A	L	L	L	(3.3)	(3.4)	(3.7)	(3.6)	(3.5)	L	H						
25							L	A	3.4	3.4	3.4^{H}	3.5	3.5	C	C	3.4	3.3	L						
26									L	(3.6)	(3.6)	$(3.3)^{H}$	3.3	(3.4)	C	C	3.6	L						
27								L	L	(3.6)	3.7^{H}	C	(3.7)	3.6	3.3	$(3.5)^{H}$	$(3.5)^{H}$	L						
28									3.4	3.5	(3.6)	3.2	3.5	A	C	(3.5)	(3.5)	L						
29									L	$(3.8)^{H}$	(3.6)	C	$(3.7)^{H}$	(3.7)	$(3.6)^{H}$	(3.6)	L	L						
30								L	L	(3.5)	3.7	3.8	3.7	(3.5)	$(3.4)^{H}$	3.6	(3.5)	L	L					
31								3.8^{K}	3.3^{K}	$(3.2)^{H}_{K}$	3.6^{K}	3.5^{K}	3.6^{K}	3.5^{K}	3.3^{K}	C^{K}	A^{K}	A^{K}	A^{K}					
Sum																								
Median								3.3	3.4	3.5	3.6	3.5	3.6	3.6	3.5	3.5	3.4	3.4						
Count							0	11	16	27	27	25	29	25	25	25	24	9	0					

TABLE 80
IONOSPHERE DATA- 12

Washington, D.C. (Location) Ionosphere Station

National Bureau Of Standards (Institution)

Hourly values of E-MI500 for August (Month) 1946

Records measured by: A. K. B. J. L. S.

TIME: 75° W MERIDIAN

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1							(4.2)	A	C	A	A	A	C	A	A	A	4.2	A	4.2					
2							C	C	C	A	(4.5)	A	C	B	B	C	C	(4.0)	4.0	C				
3						C	A	4.1	4.2	A	(4.2)	(4.2)	C	(4.2)	4.0	4.1	4.1	C	4.1	C				
4						C	(4.4)	4.2	(4.3)	(4.4)	(4.3)	C	C	(4.2)	(4.1)	C	(4.3)	(4.1)	4.0	C				
5							A	A	4.3	(4.4)	(4.3)	A	(4.1)	C	A	4.0	4.0	(4.0)	4.2					
6							C	4.0	4.2	A	(4.2)	(4.2)	A	C	4.4	C	C	(4.2)	C					
7							A^K	(4.1)^K	A^K	(4.2)^K	(4.3)^K	A^K	(4.1)^K	C^K	4.2^K	4.3^K	C^K	(4.3)^K	C^K	C^K				
8							3.8	(4.0)	4.2	4.3	A	(4.3)	A	(4.2)	A	4.0	4.0	4.0	(4.1)					
9							C	4.1	A	A	A	(4.3)	A	4.2	(4.5)	A	A	A	A					
10							(4.1)	4.0	4.3	4.2	A	A	A	A	A	A	4.1	4.3	A					
11							C^K	(4.1)^K	A^K	4.1^K	(4.1)^K	4.3^K	A^K	4.3^K	A^K	A^K	4.2^K	(4.2)^K	C^K					
12							C^K	A^K	A^K	A^K	A^K	B^K	(4.1)^K	4.0^K	4.3^K	A^K	C^K	(4.2)^K	C^K	C^K				
13							C^K	C^K	A^K	C^K	B^K	4.0^K	(4.2)^K	4.0^K	A^K	(4.2)^K	(4.1)^K	4.3^K	(4.2)^K					
14							A^K	4.2^K	C^K	C^K	(4.3)^K	4.0^K	C^K	4.3^K	4.3^K	C^K	A^K	4.1^K	4.3					
15							A	(4.1)	4.3	4.3	A	C	B	B	(4.2)	(4.2)	(4.0)	4.1	4.1	C				
16							(4.0)^K	4.4^K	(4.2)^K	4.5^K	4.3^K	C^K	(4.2)^K	A^K	(4.3)^K	(3.6)^K	4.2^K	(4.0)^K	4.2^K	(4.0)^K				
17							(3.9)^K	4.2^K	4.4^K	(4.2)^K	C^K	(4.3)^K	C^K	C^K	4.1^K	4.1^K	3.9^K	4.1^K	A^K					
18							C	C	C	C	C	C	C	C	C	C	C	C	C	C				
19							C	C	C	A	A	A	A	A	A	C	A	A	A					
20							(4.2)^M	(4.1)^M	(4.1)^M	C	A	4.0	(4.2)	(4.2)	C	4.0	4.1	4.0	(4.1)					
21							A	A	A	A	4.2	A	4.3	4.4	4.2	4.2	A	(4.2)	3.9					
22							A	A	A	4.0	4.1	A	A	A	(4.2)	4.1	4.1	A	A					
23							4.2	A	A	A	(4.0)	(4.2)	C	4.1	4.0	A	4.1	A	4.2					
24							A	A	A	A	A	(4.3)	A	A	(4.0)	(4.0)	4.1	4.2	A					
25							C	A	A	A	4.0	(4.2)	(4.1)	C	C	A	(4.0)	4.1	A					
26							A	4.1	4.1	C	C	C	A	(4.4)	C	C	4.4	4.3	3.9					
27							(4.0)^M	3.9	(4.0)	4.2	(4.2)	C	(4.2)	4.2	4.4	(4.4)	4.0	4.1	A					
28							A	A	4.2	A	(4.2)	A	(4.2)	4.2	4.1	4.2	4.3	A	A					
29							(4.4)	A	A	A	4.3	C	4.5	(4.0)	4.1	4.2	C	C	4.4					
30							(4.0)^M	A	A	(4.1)	4.3	A	C	4.3	4.2	4.2	4.0	4.2	(4.2)					
31							(3.5)^K	(4.0)^K	4.0^K	A^K	A^K	A^K	C^K	C^K	4.1^K	C^K	C^K	4.3^K	A^K					
Sum																								
Median							(4.0)	4.1	4.2	4.2	(4.2)	(4.2)	(4.2)	4.2	4.2	4.2	4.1	4.2	4.2					
Count							12	16	14	12	17	12	11	16	19	16	20	22	16					

Table 81

Ionospheric Storminess, August 1946

Day August	Ionosphere Character* 00-12 GCT	12-24 GCT	Principal Storms Beginning GCT	End GCT	Geomagnetic Character ** 00-12 GCT	12-24 GCT
1	1	0			1	1
2	2	1			1	1
3	1	3			1	1
4	2	3			1	1
5	1	1			1	1
6	2	2			1	2
7	2	4	0700	----/	2	3
8	3	1	----	1100	1	2
9	2	2			1	1
10	1	3			0	2
11	2	5	0900	----	3	3
12	4	4	----	----	2	2
13	4	4	----	----	2	1
14	4	4	----	----	3	3
15	4	2	----	1000	3	3
16	2	4	1100	----	3	3
17	3	5	----	----	3	3
18	***	***	----	0300	1	1
19	***	2			1	1
20	1	2			1	1
21	1	1			1	0
22	1	1			1	0
23	***	3			0	0
24	1	3			2	1
25	***	3			2	1
26	1	0			1	1
27	2	0			1	1
28	1	0			1	1
29	1	3			0	0
30	0	1			0	2
31	4	5	0500	----//	4	3

*Ionosphere character figure (I-figure) for ionospheric storminess at Washington, D.C., during 12-hour period, on an arbitrary scale of 0 to 9, 9 representing the greatest disturbance.

**Average for 12 hours of American magnetic K-figure, determined by a number of observatories, on an abritrary scale of 0 to 9, 9 representing the greatest disturbance.

***No readable record. Refer to Table 70 for detailed explanation.

/Dashes indicate continuing storm.

//Storm continued after 2300 August 31.

Table 82

Sudden Ionosphere Disturbances Observed at Washington, D.C.

Day	GCT Beginning	GCT End	Location of Transmitters	Relative Intensity at minimum*	Other Phenomena
August 2	1440	1520	Ohio, D.C., Chile, England, Mexico, New Brunswick	0.1	
2	1802	1830	Ohio, D.C., Chile, England, Hawaii, Mexico, Ontario	0.1	Terr. mag. pulse** 1802-1825
2	1840	1900	Ohio, D.C., Chile, England, Hawaii, Mexico, Ontario	0.0	Terr. mag. pulse** 1840-1900
3	1301	1320	Ohio, D.C., Chile, England, Mexico, Ontario	0.03	Terr. mag. pulse** 1300-1320
3	1514	1540	Ohio, D.C., Chile, England, Mexico, Ontario	0.0	
8	1419	1445	Ohio, D.C., Chile, England, Mexico, Ontario	0.1	
8	1512	1540	Ohio, D.C., England, Mexico, Ontario	0.05	
12	1402	1410	Ohio, D.C., Chile, England, Mexico, Ontario	0.2	Terr. mag. pulse** 1402-1410
15	1528	1720	Ohio, D.C., England, Mexico, Ontario	0.0	
16	2140	2200	Ohio, D.C., Chile, England, Hawaii, Mexico, Ontario	0.05	

*Ratio of received field intensity during SID to average field intensity before and after, for station W8XAL, 6080 kilocycles, 600 kilometers distant.

**As observed on Cheltenham magnetogram of the United States Coast and Geodetic Survey.

Table 83

Sudden Ionospheric Disturbances Reported by Engineer-in-Chief

Cable and Wireless, Ltd.

Day	GCT Beginning	GCT End	Receiving Station	Location of Transmitters
[illegible]	1045	1110	Brentwood, England	Austria, Belgian Congo, Brazil, Bulgaria, Canary Islands, Greece, India, Palestine, Southern Rhodesia, Spain, Switzerland, Turkey, U.S.S.R., Yugoslavia, Zanzibar
[illegible]	0740	0830	Brentwood, England	Bulgaria, Canary [illegible] India, Iran, [illegible] Palestine, Portugal, Southern Rhodesia, Spain, Syria, Turkey, U.S.S.R., Yugoslavia
[illegible]	0750	0930	Somerton, England	Ceylon, China, India, Soviet Union in Asia
[illegible]	1240	1310	Brentwood, England	Austria, Iran, Madagascar, Venezuela
[illegible]	1500	1630	Brentwood, England	Austria, Brazil, [illegible] India, Iran, Palestine, Spain, Switzerland, U.S.S.R., Venezuela
[illegible]	1510	1630	Somerton, England	Australia, Ceylon, China, India, Japan, New York
[illegible]	0730	0815	Brentwood, England	Bulgaria, French Equatorial Africa, Iran, Madagascar, Spain, Yugoslavia
[illegible]	0900	0945	Brentwood, England	Austria, Belgian Congo, Bulgaria, Greece, India, Kenya, Madagascar, Portugal, Southern Rhodesia, Spain, Syria, U.S.S.R., Yugoslavia

Table 83 (Continued)

Day	GCT Beginning	GCT End	Receiving Station	Location of Transmitters
[illegible]	1040	1115	Brentwood, England	Belgian Congo, Brazil, Bulgaria, Chile, Greece, India, Iran, Kenya, Madagascar, Palestine, Southern Rhodesia, Spain, Syria, Uruguay, Yugoslavia, Zanzibar
[illegible]	[illegible]	1215	Brentwood, England	Austria, Belgian Congo, Brazil, Bulgaria, Chile, Greece, India, Iran, Kenya, Madagascar, Palestine, Portugal, Southern Rhodesia, Spain, Syria, Thailand, Venezuela, Yugoslavia, Zanzibar
[illegible]	1430	1520	Brentwood, England	Brazil, Canary Islands, Chile, French Equatorial Africa, Madagascar, Portugal, Southern Rhodesia, Spain, Thailand, U.S.S.R., Venezuela, Yugoslavia
[illegible]	1430	1520	Somerton, England	Argentina, Barbados, Egypt, Gold Coast, New York
[illegible]	1730	1800	Brentwood, England	Brazil, Canary Islands, Chile, Colombia, Madagascar, Portugal, Spain, Uruguay, Venezuela
[illegible]	1720	1840	Somerton, England	Argentina, Barbados, Canada, New York
[illegible]	1040	1440	Brentwood, England	Brazil, Chile, Colombia, Greece, Madagascar, Switzerland, Uruguay, Venezuela
[illegible]	1345	1425	Somerton, England	Argentina, Barbados, Canada, Egypt, Gold Coast, India, New York, Union of South Africa

Table 83 (Continued)

Day	GCT Beginning	End	Receiving Station	Location of Transmitters
July				
25	0915	0945	Brentwood, England	Belgian Congo, Kenya, Southern Rhodesia
25	1510	1600	Brentwood, England	Austria, Brazil, Chile, Spain, U.S.S.R.
25	1510	1530	Somerton, England	Argentina, China, New York
25	1610	----	Brentwood, England	Austria, Belgian Congo, Brazil, Bulgaria, Canary Islands, Chile, Colombia, Greece, India, Iran, Palestine, Southern Rhodesia, Spain, Switzerland, Syria, Thailand, Turkey, Uruguay, U.S.S.R., Venezuela, Yugoslavia
25	1615	----	Somerton, England	Argentina, Australia, Barbados, Canada, Ceylon, China, Egypt, Gold Coast, India, Japan, New York, Union of South Africa
26	0745	0810	Brentwood, England	Greece, India, Iran, Kenya, Madagascar, Turkey, Southern Rhodesia
27	1410	1545	Brentwood, England	Brazil, Canary Islands, Chile, Colombia, France, Spain, Switzerland, Thailand, Uruguay, Venezuela
30	1605	1630	Brentwood, England	Brazil, Chile, Colombia, Venezuela
August				
2	1448	1525	Brentwood, England	Brazil, Chile, Colombia, Spain, Venezuela
3	0820	0845	Brentwood, England	Austria, India, Kenya, Madagascar, Palestine, Southern Rhodesia, Turkey, U.S.S.R., Yugoslavia

Table 83 (Continued)

Day	GCT Beginning	End	Receiving Station	Location of Transmitters
August				
3	1035	1115	Brentwood, England	Austria, Belgian Congo, Brazil, Canary Islands, Greece, India, Iran, Kenya, Palestine, Portugal, Southern Rhodesia, Spain, Switzerland, Syria, Turkey, U.S.S.R., Yugoslavia, Zansibar
3	1036	1115	Somerton, England	Argentina, Australia, Barbados, Canada, Ceylon, China, Egypt, Gold Coast, India, Japan, Malay States, New York, Union of South Africa
3	1300	1400	Brentwood, England	Austria, Belgian Congo, Brazil, Bulgaria, Chile, Colombia, Greece, India, Iran, Madagascar, Palestine, Spain, Switzerland, Syria, Thailand, Turkey, U.S.S.R., Venezuela, Zansibar
3	1306	1440	Somerton, England	Argentina, Australia, Barbados, Canada, Ceylon, China, Gold Coast, India, Japan, New York, Union of South Africa
3	1515	1545	Brentwood, England	Austria, Belgian Congo, Brazil, Canary Islands, Chile, Madagascar, Spain, U.S.S.R., Venezuela
3	1520	1635	Somerton, England	Argentina, Barbados, Canada, New York
8	1430	1600	Brentwood, England	Brazil, Chile, Colombia, Venezuela
12	1355	1425	Brentwood, England	Austria, Belgian Congo, Bulgaria, Chile, Greece, India, Iran, Kenya, Palestine, Spain

Note - Observers are invited to send to the CRPL information on times of beginning and end of sudden ionosphere disturbances, for publication as above. Address letters to Central Radio Propagation Laboratory, National Bureau of Standards, Washington 25, D. C.

Table 54

Provisional Radio Propagation Quality Figures
July 1946
Compared with CRPL Warnings and CRPL Probable Disturbed Period Forecasts

Day	North Atlantic								North Pacific							
	Quality Figure		CRPL* Warning		CRPL** Probable Disturbed Period Forecast		Geomagnetic K_A		Quality Figure		CRPL* Warning		CRPL** Probable Disturbed Period Forecast		Geomagnetic K_A	
	01-12 GCT	13-24 GCT	01-12 GCT	13-24 GCT			01-12 GCT	13-24 GCT	01-12 GCT	13-24 GCT	01-12 GCT	13-24 GCT			01-12 GCT	13-24 GCT
1	6	6	X				0	1	6	7	X				0	1
2	5	5					2	2	5	6					2	2
3	(4)	5					3	2	6	(4)					3	2
4	5	6					1	1	6	6					1	1
5	7	7			X		1	1	7	8			X		1	1
6	7	6			X		1	1	6	5			X		1	1
7	5	6	X	X	X		4	3	6	7	X	X	X		4	3
8	(4)	5	X	X	X		2	2	7	8	X	X	X		2	2
9	5	5			X		3	2	6	7			X		3	2
10	5	6	X				2	2	6	7	X				2	2
11	5	6					2	2	5	7					2	2
12	6	6	X				1	1	5	5	X				1	1
13	6	6					1	1	6	-					1	1
14	5	6					2	3	5	6					2	3
15	5	6	X		X		3	1	6	-	X		X		3	1
16	5	6			X		1	3	(4)	8			X		1	3
17	5	6			X		3	2	5	7			X		3	2
18	6	5			X		2	4	5	8			X		2	4
19	(4)	(4)	X	X			4	2	(3)	5	X	X			4	2
20	5	5	X		X		1	1	(4)	(4)	X		X		1	1
21	5	5					2	2	(4)	6					2	2
22	6	5					2	2	(3)	(4)					2	2
23	5	5					3	3	(4)	(4)					3	3
24	6	5					1	1	6	7					1	1
25	5	(3)					2	3	(4)	(4)					2	3
26	(3)	(1)	X	X	X		3	5	(3)	(4)	X	X	X		3	5
27	(2)	(2)	X	X	X		7	3	(4)	(4)	X	X	X		7	3
28	(4)	(3)	X	X	X		2	3	(4)	7	X	X	X		2	3
29	(4)	(4)	X	X	X		4	4	(4)	8	X	X	X		4	4
30	(3)	(4)	X	X	X		4	3	(3)	6	X	X	X		4	3
31	5	5	X	X			2	1	5	8	X	X			2	1
Score:																
H			7		6						7		7			
M			2		3						6		6			
G			15		13						11		10			
(S)			5		7						2		3			
S			2		2						5		5			

*Broadcast on WWV, Washington, D. C. Times of warnings recorded to nearest half-day as broadcast.

**In addition to dates marked X, the following were designated as probable disturbed days on forecasts more than eight days in advance of said dates: July 4, 14.

Quality Figure Scale:

1 = Useless
2 = Very poor
3 = Poor
4 = Poor to fair
5 = Fair
6 = Fair to good
7 = Good
8 = Very good
9 = Excellent

Symbols

X Warning given or probable disturbed date.

H Quality 4 or worse on day or half day of warning.

M Quality 4 or worse on day or half day of no warning.

G Quality 5 or better on day of no warning.

(S) Quality 5 on day of warning.

S Quality 6 or better on day of warning.

( ) Quality 4 or worse (disturbed).

Geomagnetic K_A on the standard scale of 0 to 9, 9 representing the greatest disturbance.

Table 85

Daily Median Values of American Relative Sunspot Numbers*

August 1946

Date	No.	Date	No.
1	127	16	91
2	129	17	74
3	126	18	102
4	136	19	109
5	120	20	105
6	108	21	96
7	96	22	107
8	110	23	127
9	125	24	109
10	97	25	88
11	98	26	88
12	83	27	78
13	84	28	98
14	104	29	104
15	97	30	132
		31	142

No. Days 31 Mean 106.1

* Median of data from 24 observers.

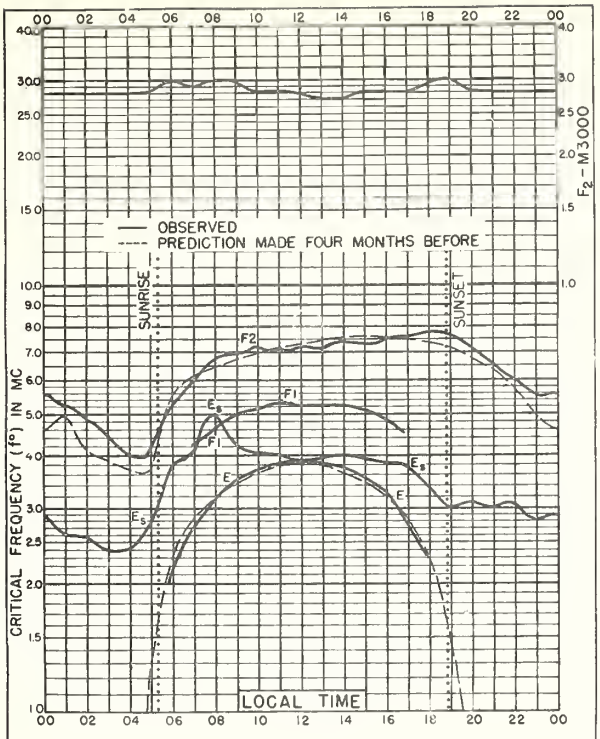

Fig. 1. WASHINGTON, D.C.
39.0°N, 77.5°W
AUGUST 1946

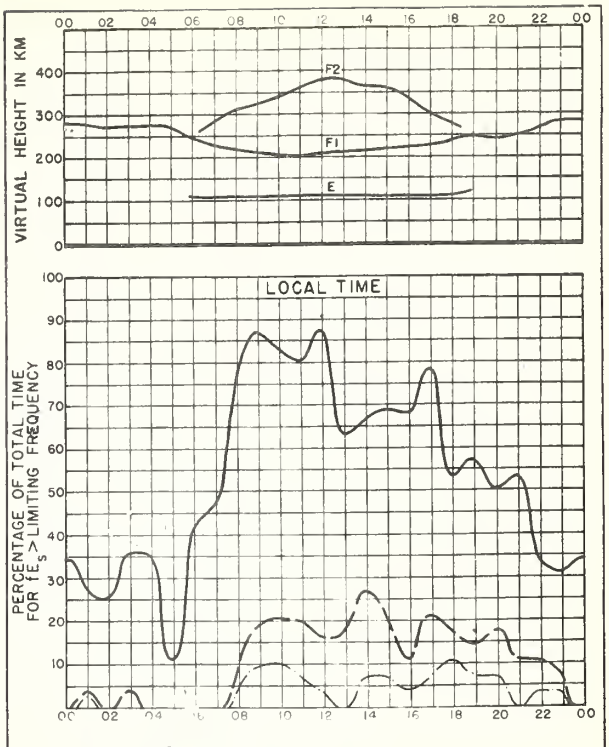

Fig. 2. WASHINGTON, D C
AUGUST 1946

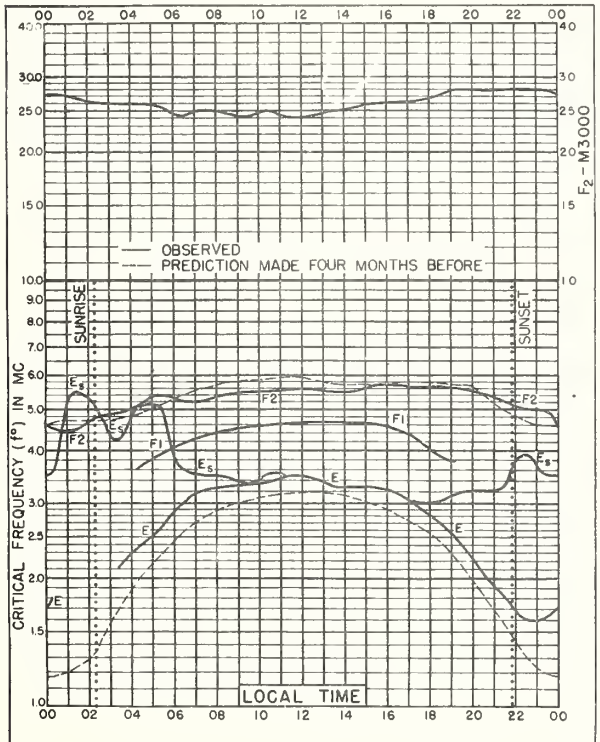

Fig. 3. FAIRBANKS, ALASKA
64.9°N, 147.8°W
JULY 1946

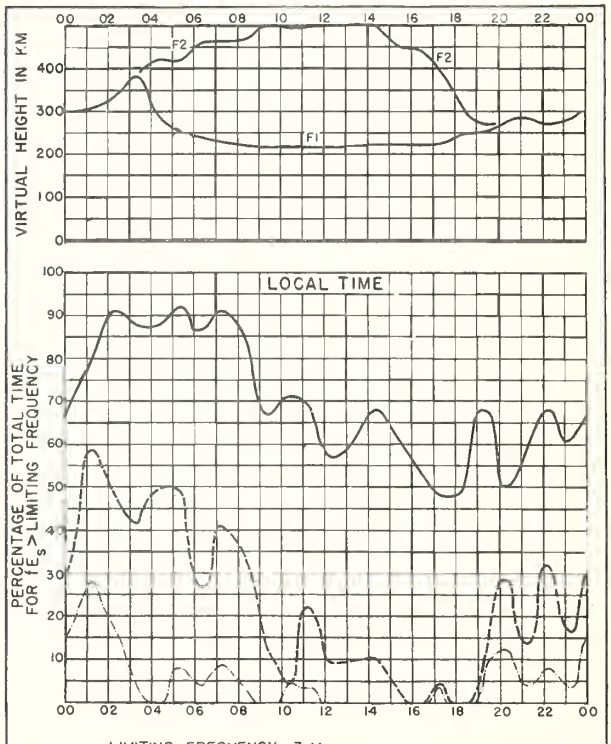

Fig. 4. FAIRBANKS, ALASKA
JULY 1946

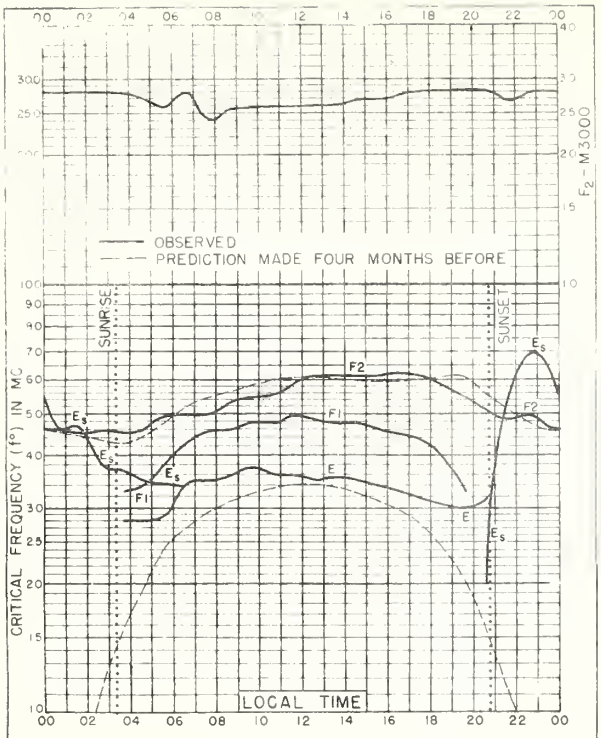

Fig. 5. CHURCHILL, CANADA
58.8°N, 94.2°W JULY 1946

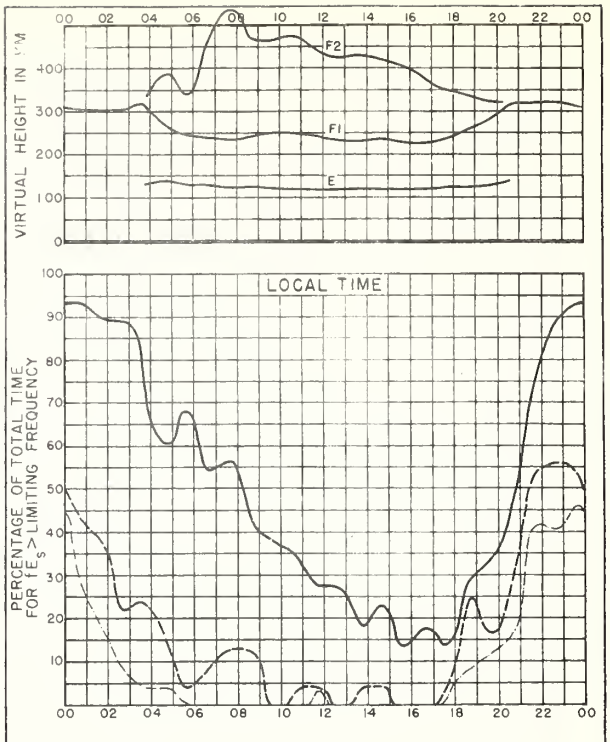

Fig. 6. CHURCHILL, CANADA JULY 1946

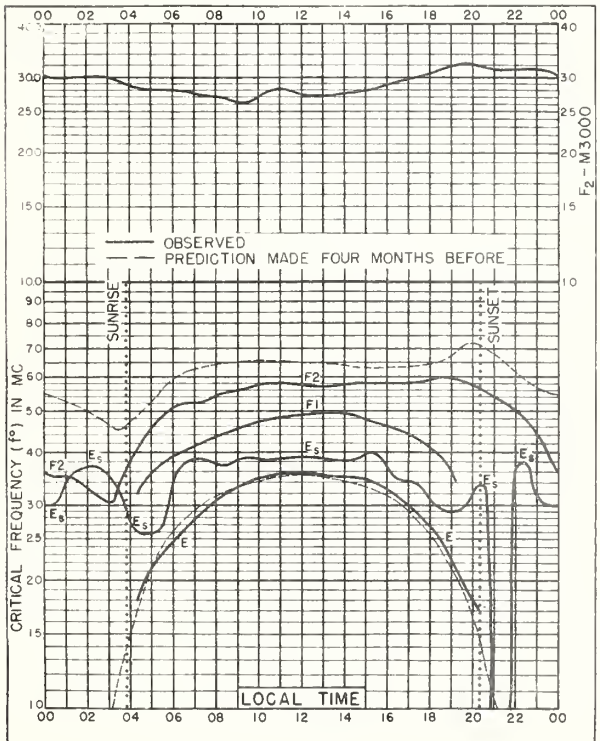

Fig. 7 PRINCE RUPERT, CANADA
54.3°N, 130.3°W JULY 1946

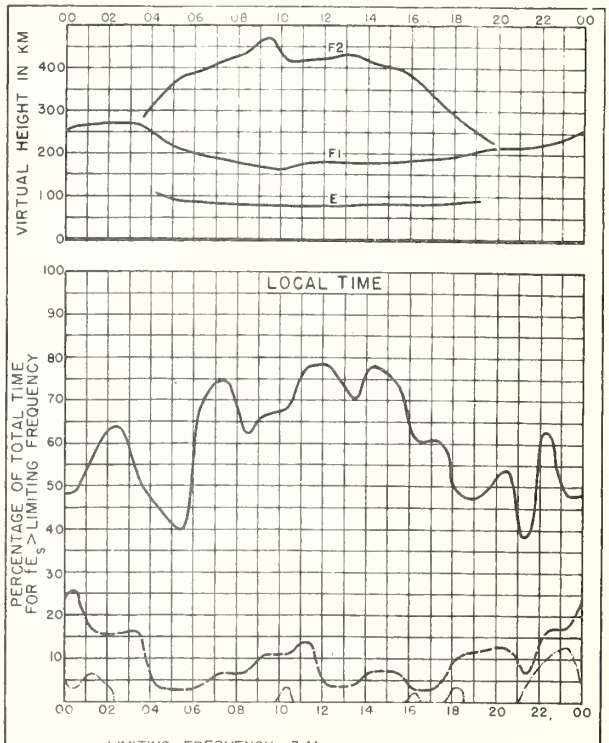

Fig. 8. PRINCE RUPERT, CANADA JULY 1946

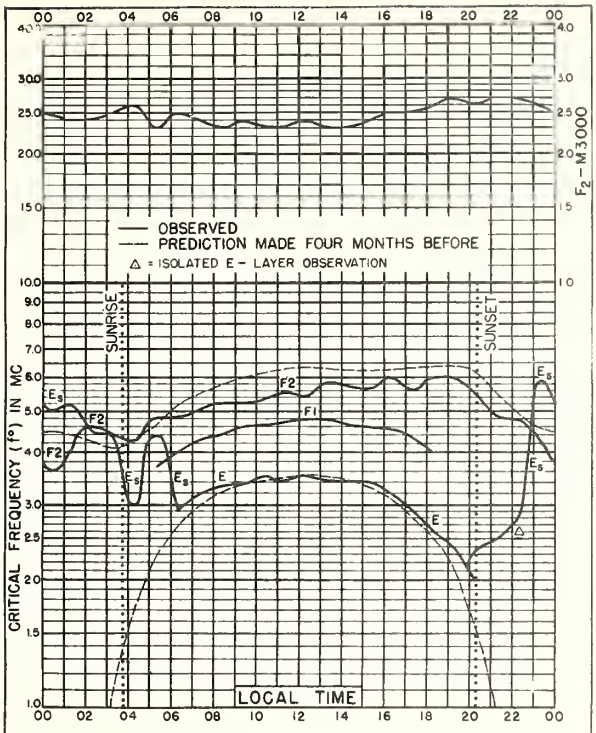

Fig. 9. THE PAS, MANITOBA
54.0°N, 101.0°W JULY 1946

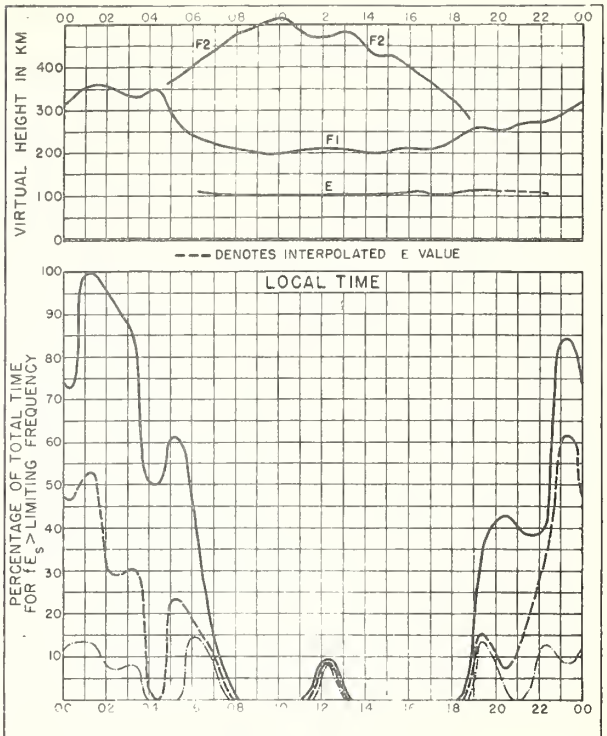

Fig. 10. THE PAS, MANITOBA JULY 1946

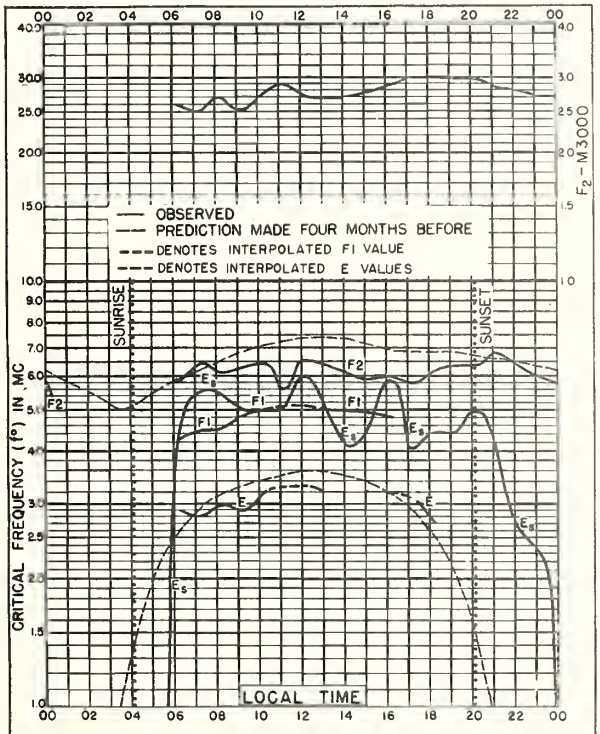

Fig. 11. ADAK, ALASKA
51.9°N, 176.6°W JULY 1946

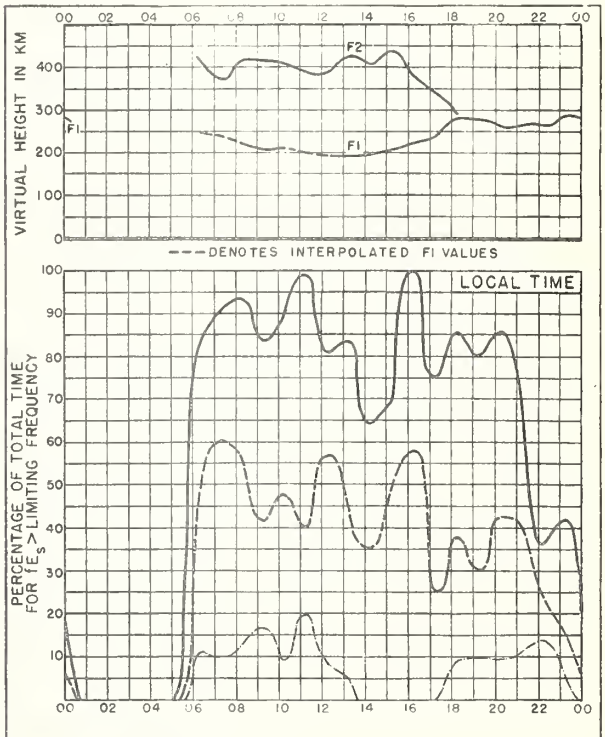

Fig. 12. ADAK, ALASKA JULY 1946

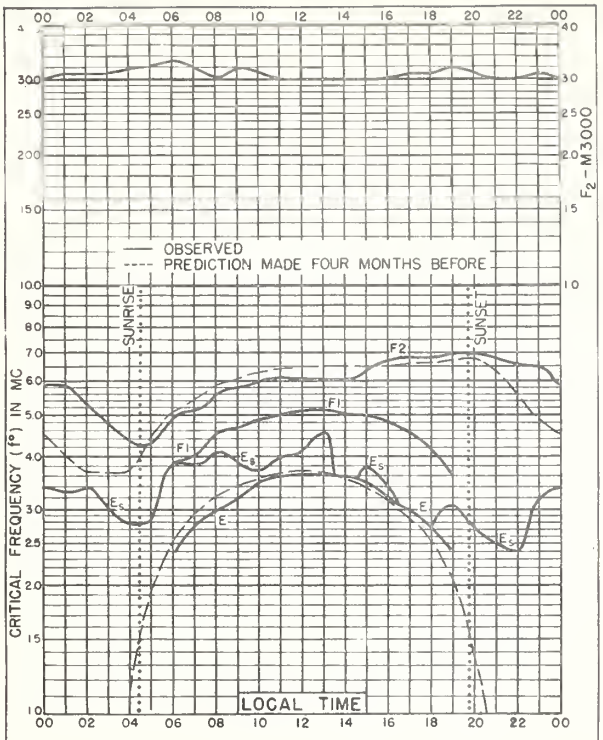

Fig. 13. ST. JOHN'S, NEWFOUNDLAND
47.6°N, 52.7°W JULY 1946

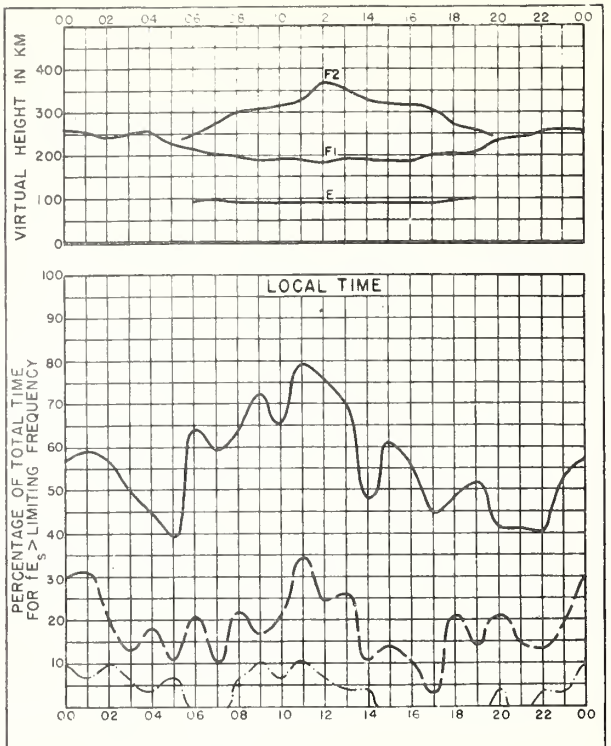

Fig 14. ST. JOHN'S, NEWFOUNDLAND JULY 1946

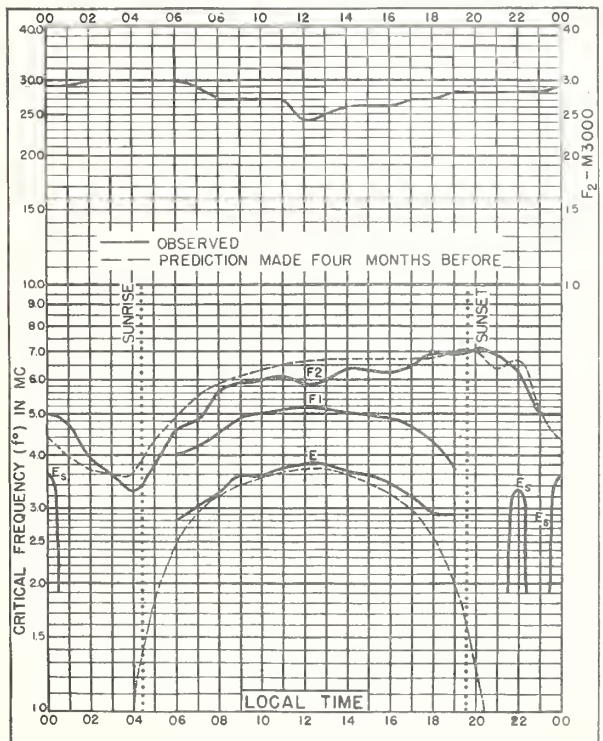

Fig. 15. OTTAWA, CANADA
45.5°N, 75.8°W JULY 1946

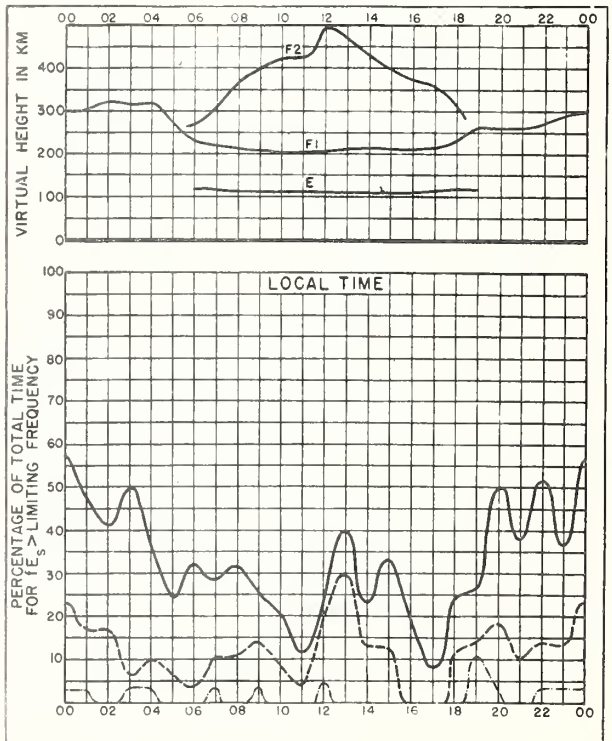

Fig. 16. OTTAWA, CANADA JULY 1946

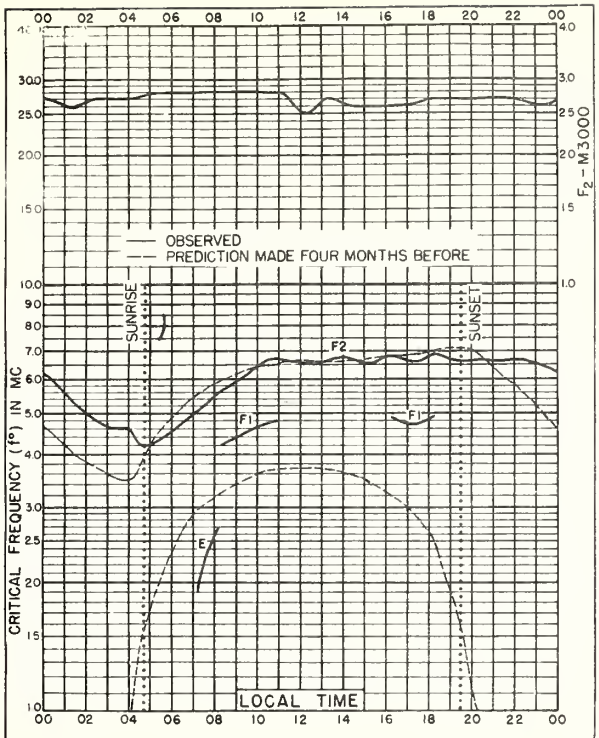

Fig. 17. BOSTON, MASSACHUSETTS
42.4°N, 71.2°W JULY 1946

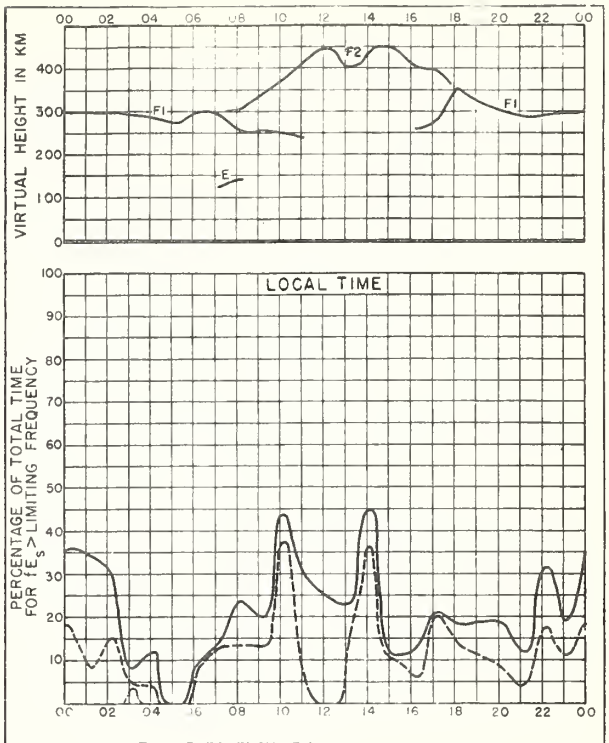

Fig. 18. BOSTON, MASSACHUSETTS JULY 1946

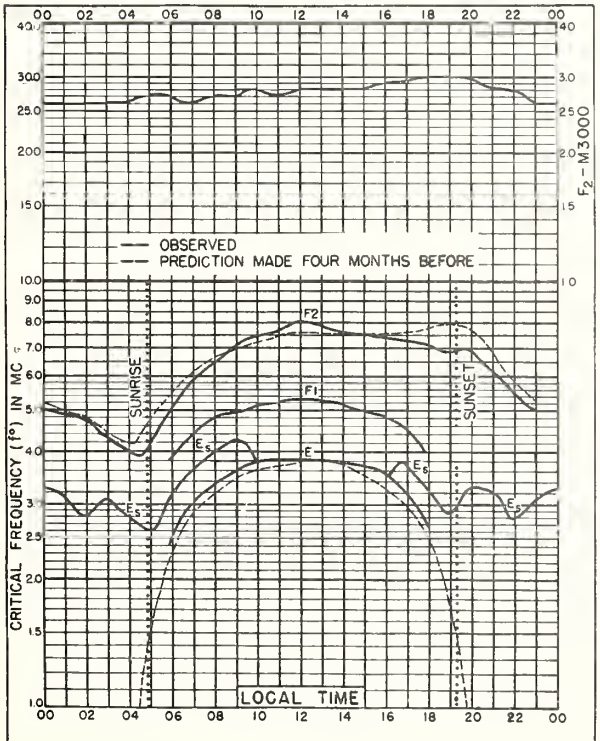

Fig. 19. SAN FRANCISCO, CALIFORNIA
37.4°N, 122.2°W JULY 1946

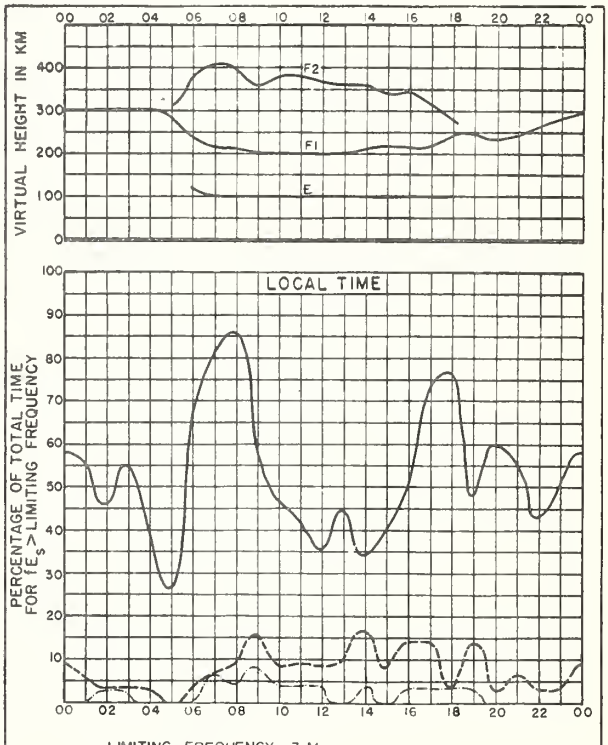

Fig. 20. SAN FRANCISCO, CALIFORNIA JULY 1946

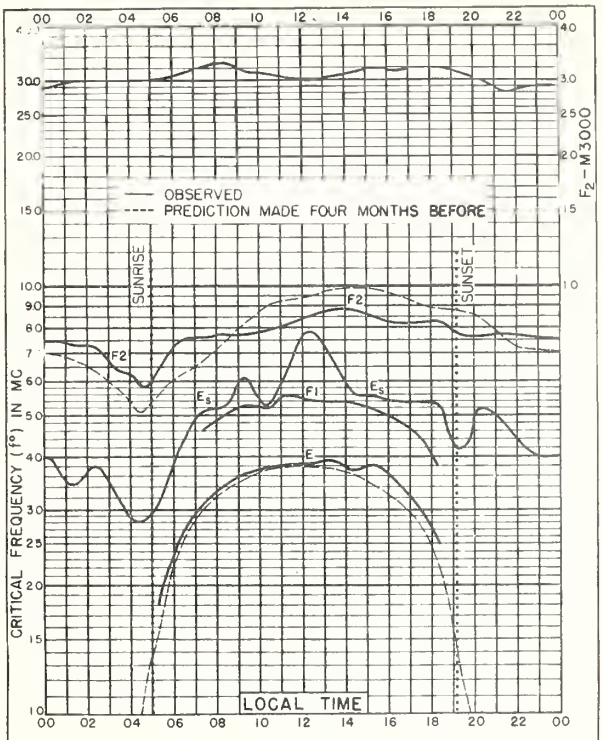

Fig. 21. TOKYO, JAPAN
35.6°N, 139.6°E JULY 1946

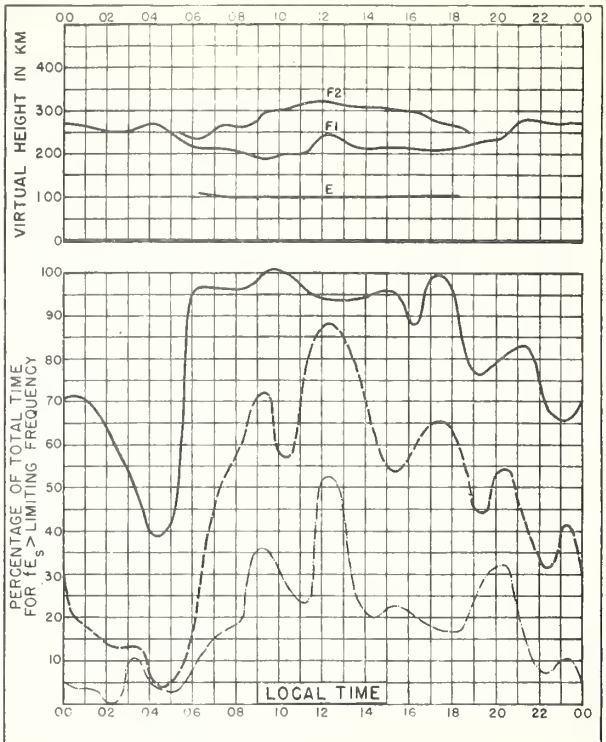

Fig. 22. TOKYO, JAPAN JULY 1946

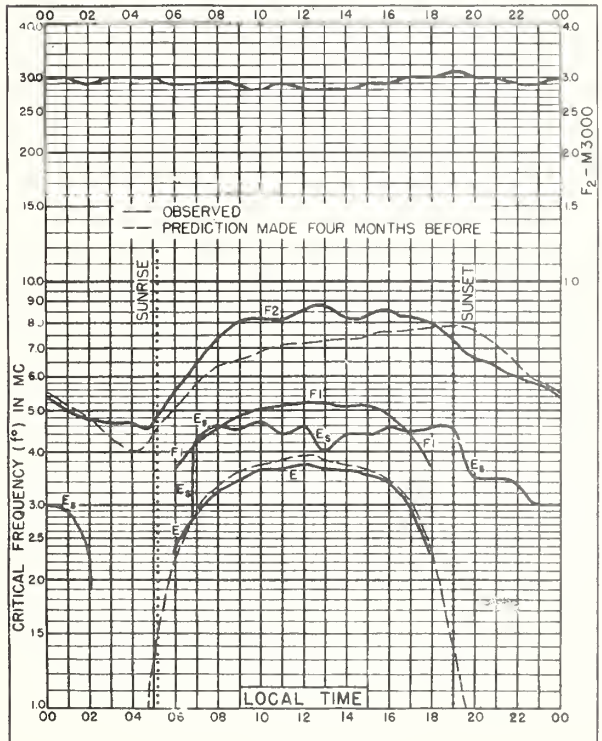

Fig. 23. BATON ROUGE, LOUISIANA
30.5°N, 91.2°W JULY 1946

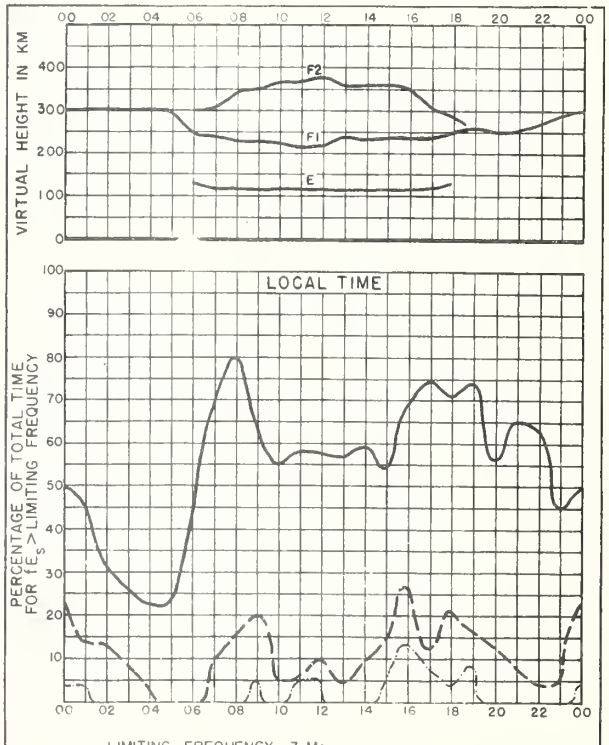

Fig. 24. BATON ROUGE, LOUISIANA JULY 1946

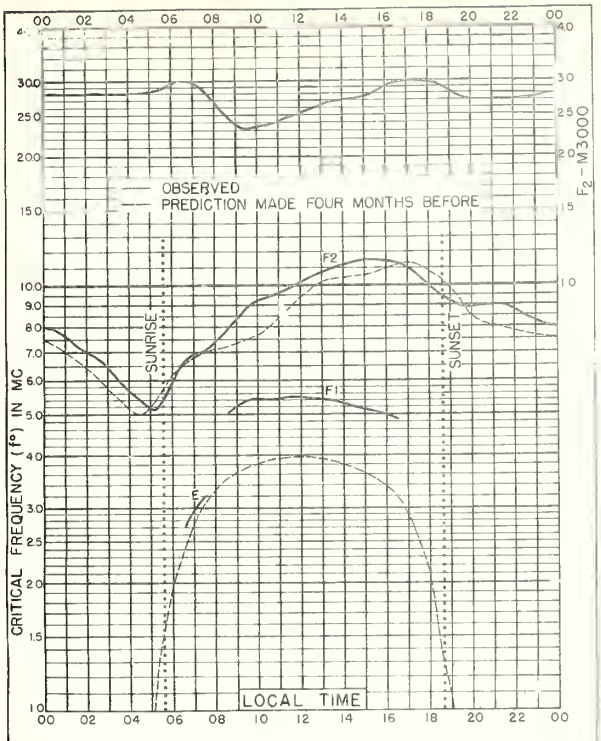

Fig. 25. MAUI, HAWAII
20.8°N, 156.5°W JULY 1946

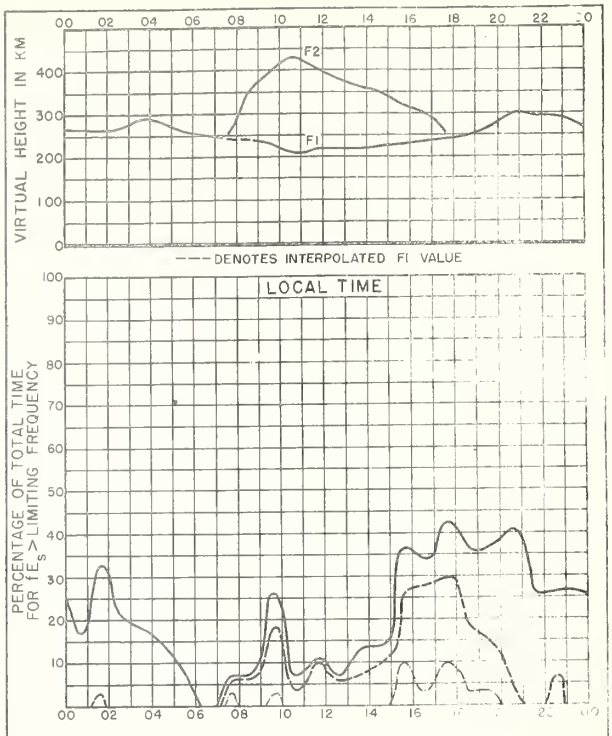

Fig. 26. MAUI, HAWAII JULY 1946

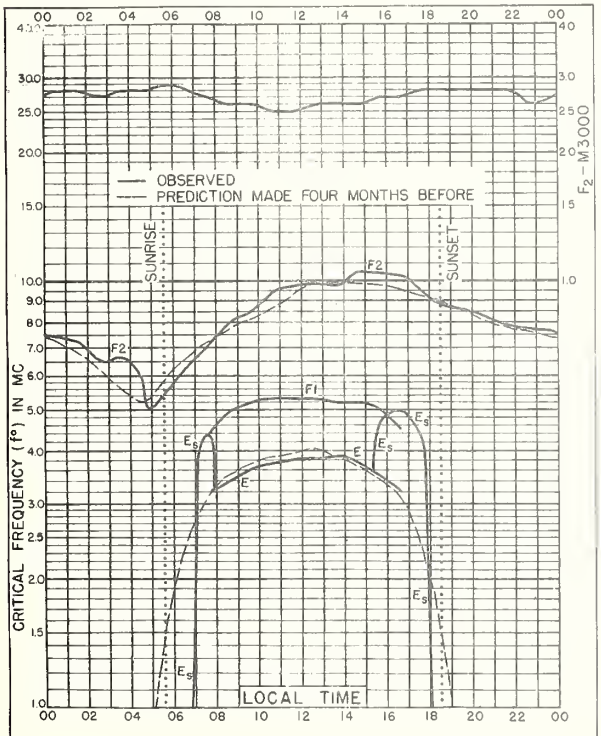

Fig. 27. SAN JUAN, PUERTO RICO
18.4°N, 66.1°W JULY 1946

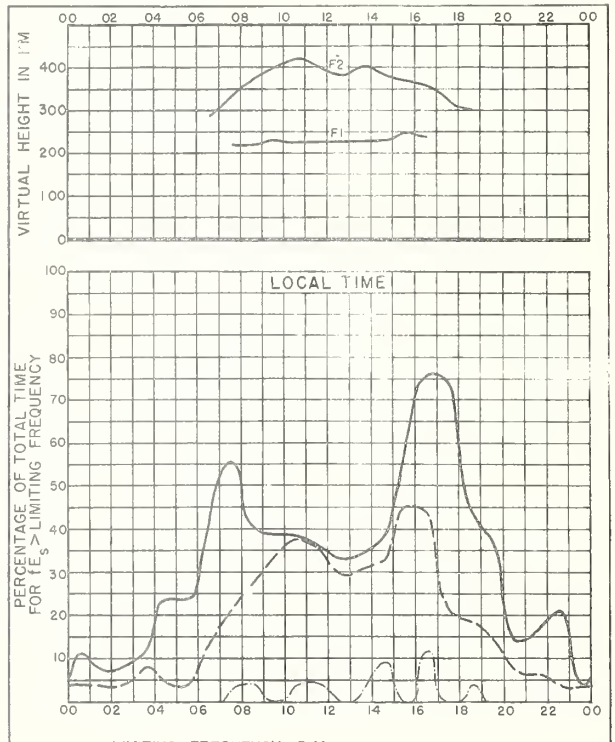

Fig. 28. SAN JUAN, PUERTO RICO JULY 1946

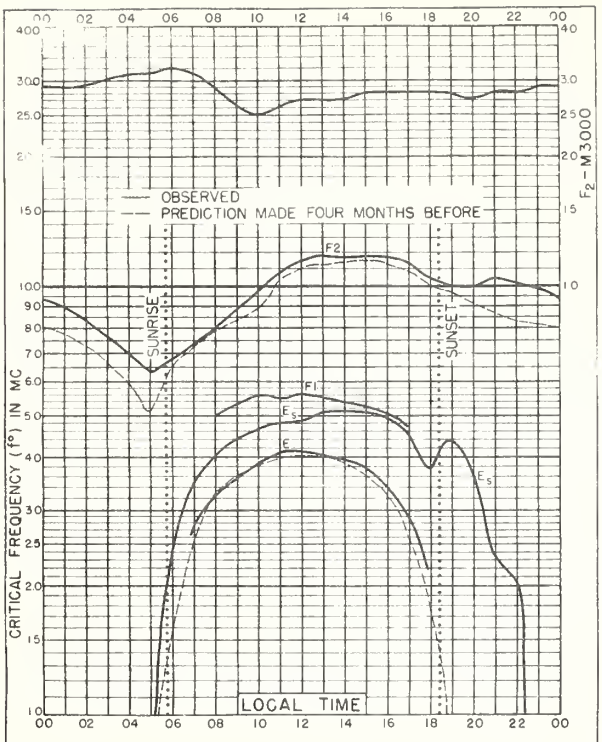

Fig 29. TRINIDAD, BRIT. WEST INDIES
10.6°N, 61.2°W JULY 1946

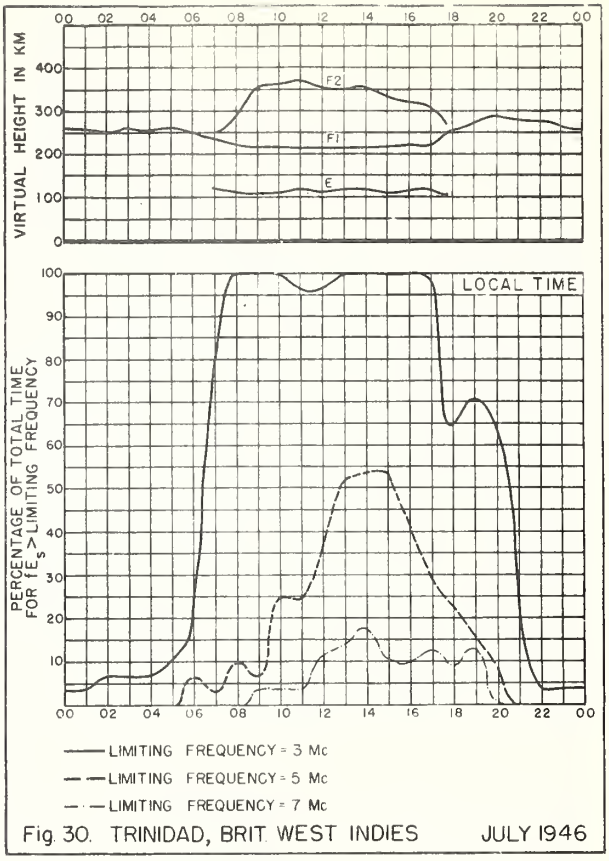

Fig. 30. TRINIDAD, BRIT. WEST INDIES JULY 1946

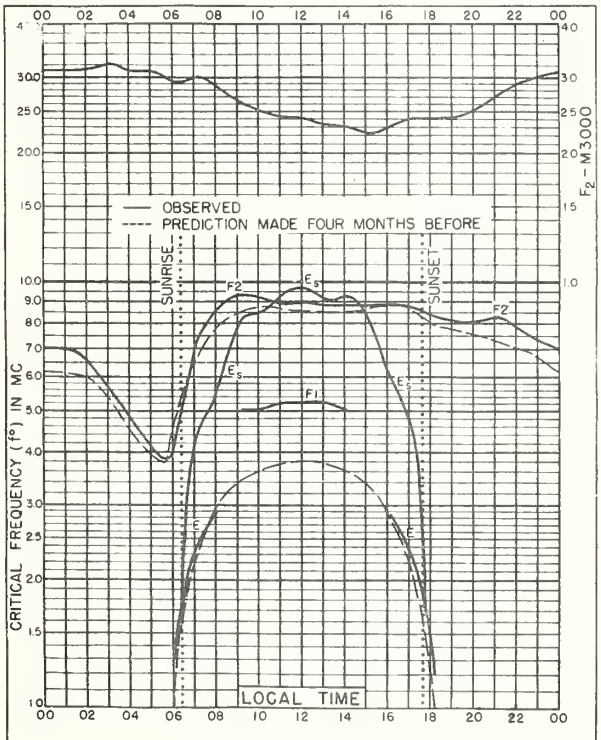

Fig 31. HUANCAYO, PERU
12.0°S, 75.3°W JULY 1946

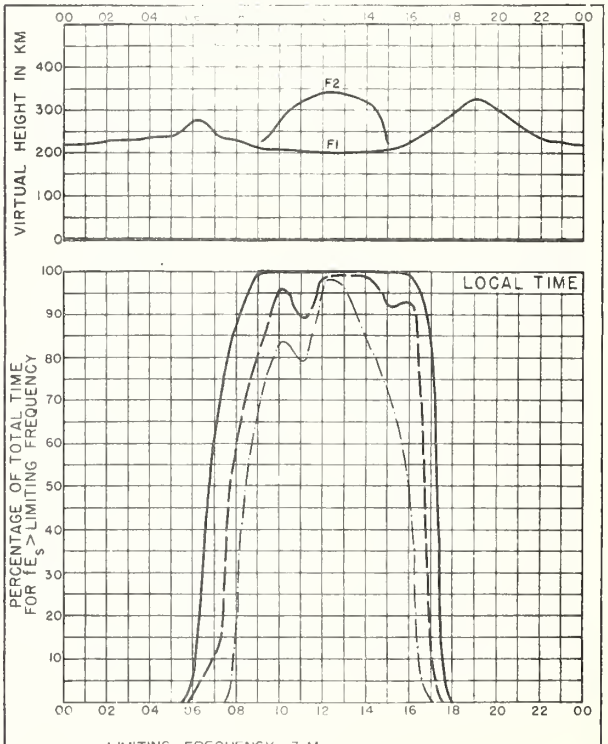

Fig 32. HUANCAYO, PERU JULY 1946

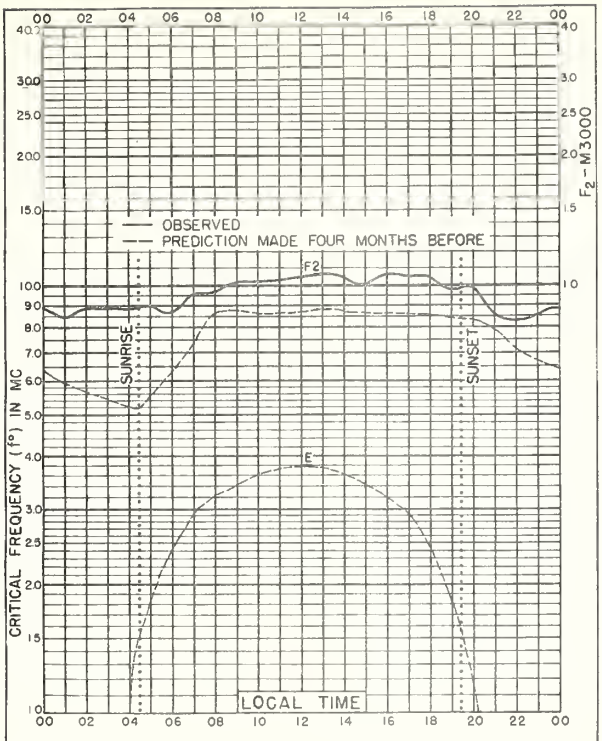

Fig. 33. PEIPING, CHINA
39.9°N, 116.4°E JUNE 1946

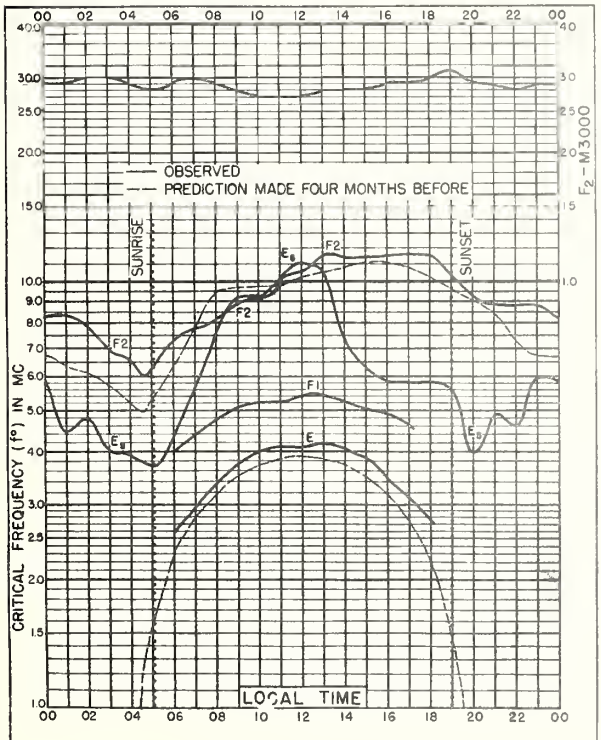

Fig. 34. CHUNGKING, CHINA
29.4°N, 106.8°E JUNE 1946

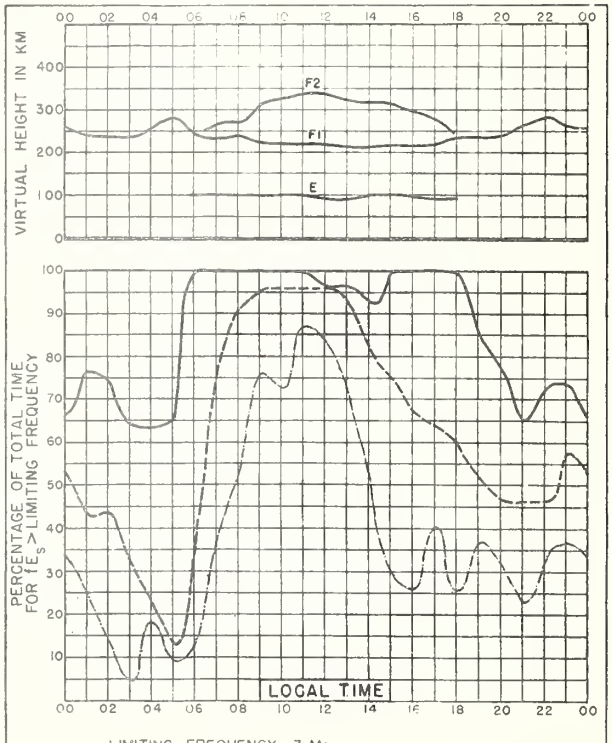

Fig. 35. CHUNGKING, CHINA JUNE 1946

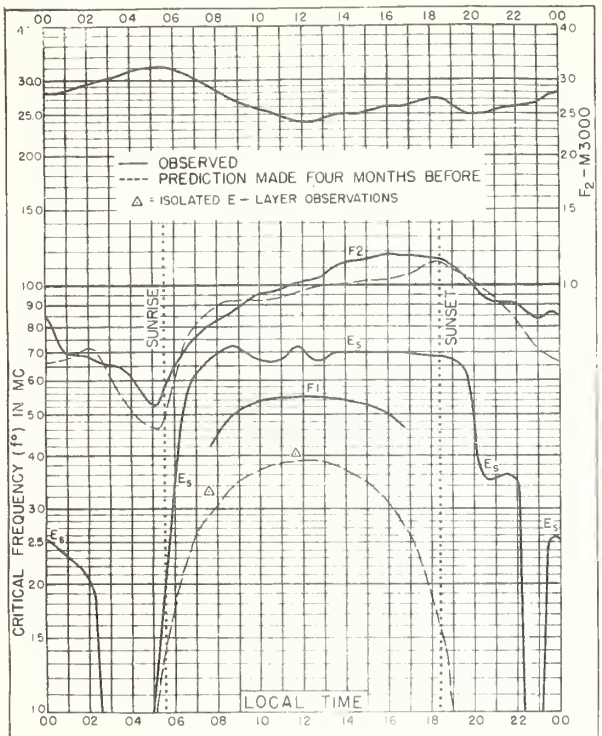

Fig. 36. GUAM I
13.5°N, 144.8°E JUNE 1946

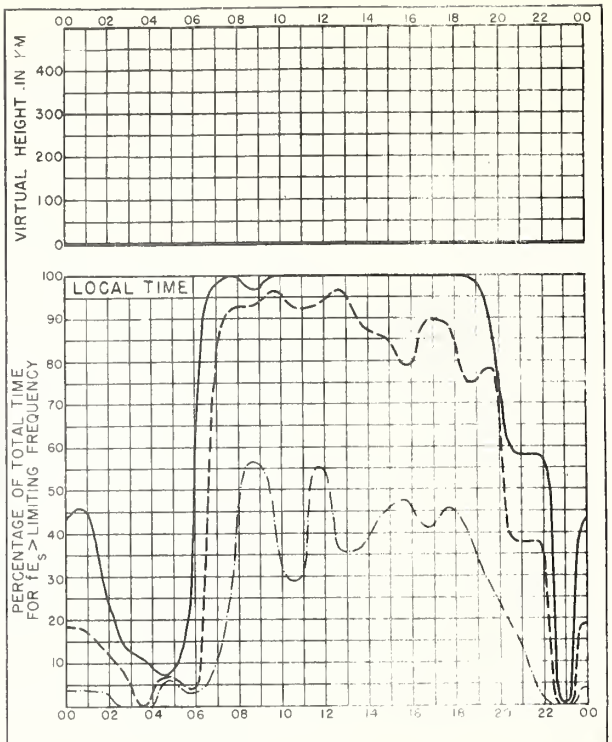

Fig. 37. GUAM I JUNE 1946

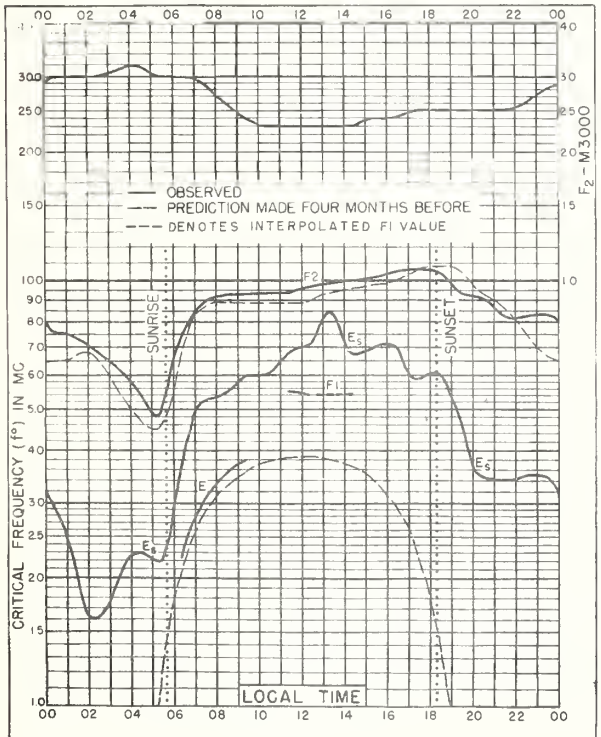

Fig. 38. LEYTE, PHILIPPINE IS.
11.0°N, 125.0°E JUNE 1946

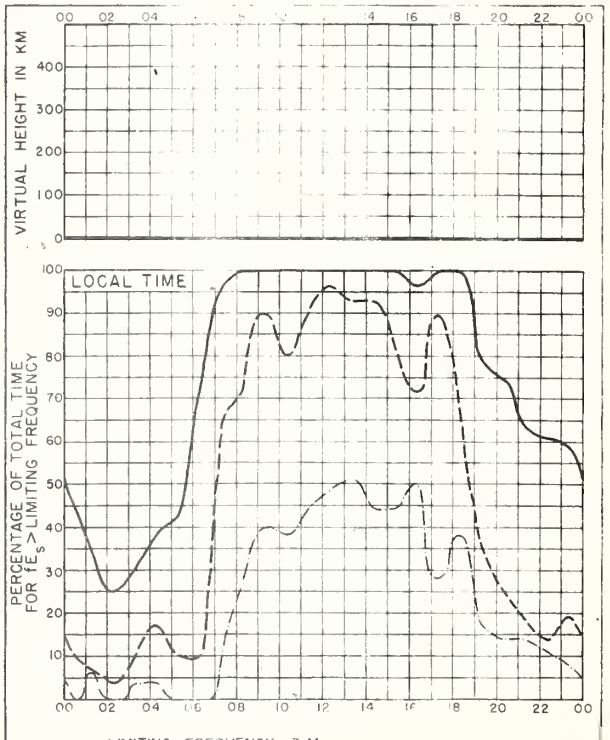

Fig. 39. LEYTE, PHILIPPINE IS. JUNE 1946

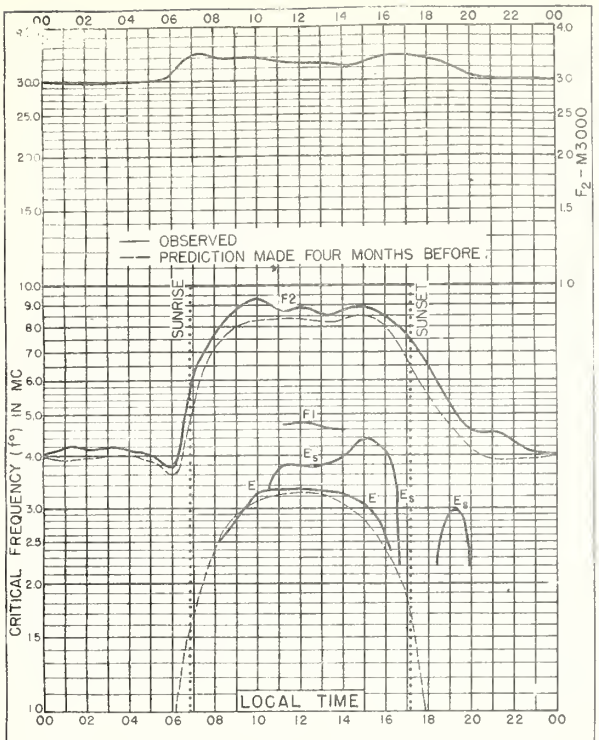

Fig. 40. BRISBANE, AUSTRALIA
27.5°S, 153.0°E JUNE 1946

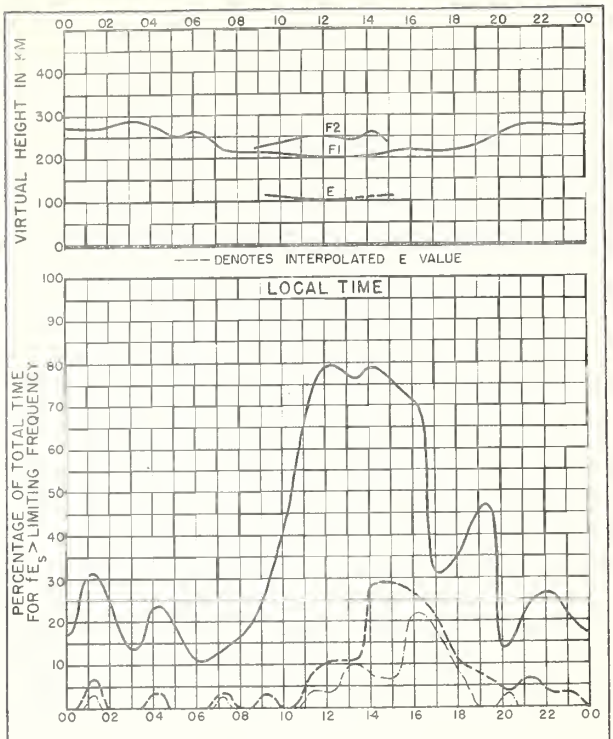

Fig 41 BRISBANE, AUSTRALIA JUNE 1946

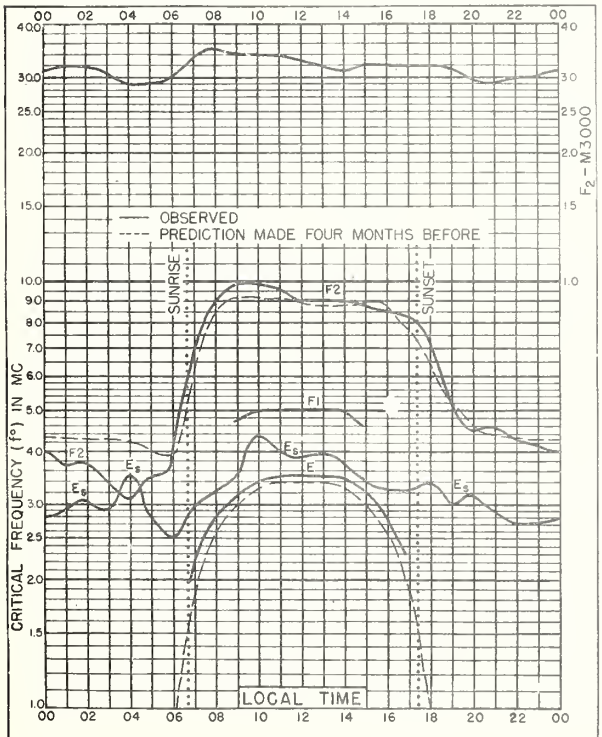

Fig. 42. TOWNSVILLE, AUSTRALIA
19.4°S, 146.5°E JUNE 1946

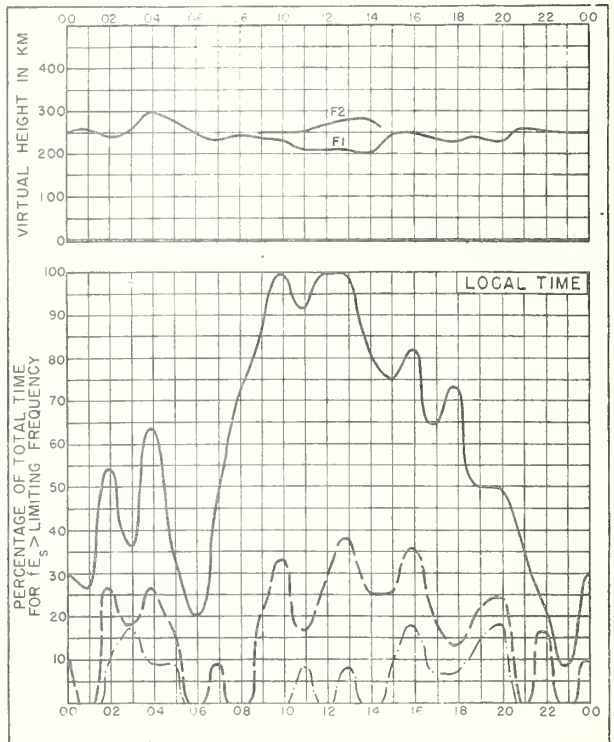

Fig. 43. TOWNSVILLE, AUSTRALIA JUNE 1946

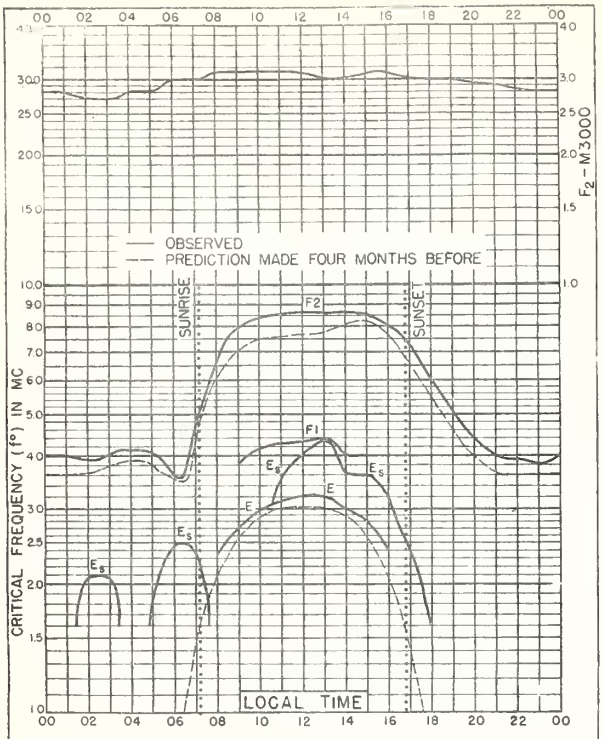

Fig. 44. CANBERRA, AUSTRALIA
35.3°S, 149.0°E JUNE 1946

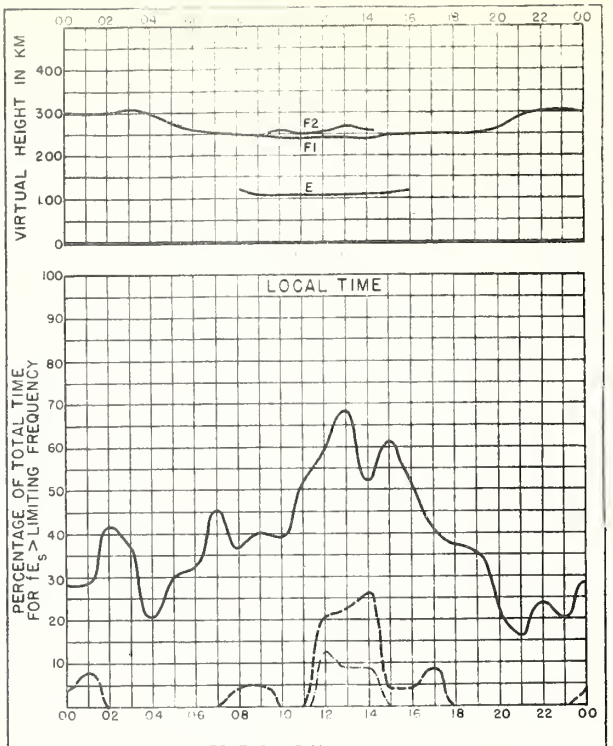

Fig 45. CANBERRA, AUSTRALIA JUNE 1946

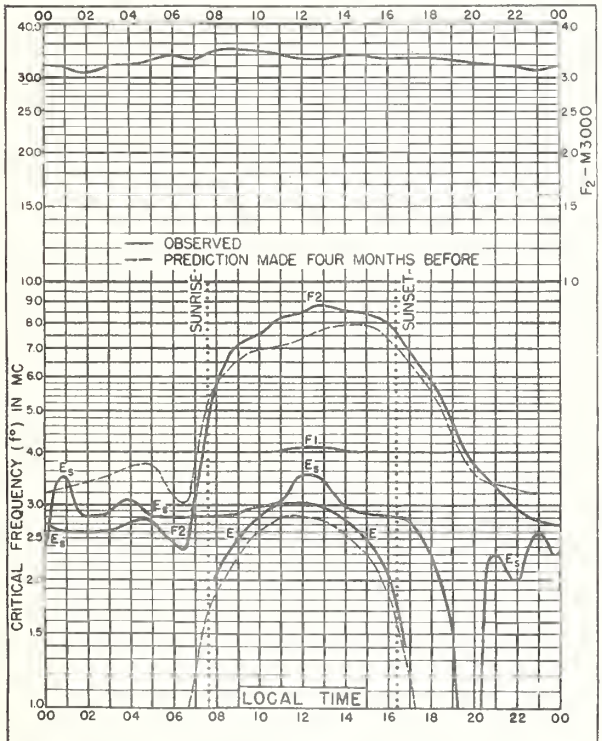

Fig. 46. HOBART, TASMANIA
42.8°S, 147.4°E JUNE 1946

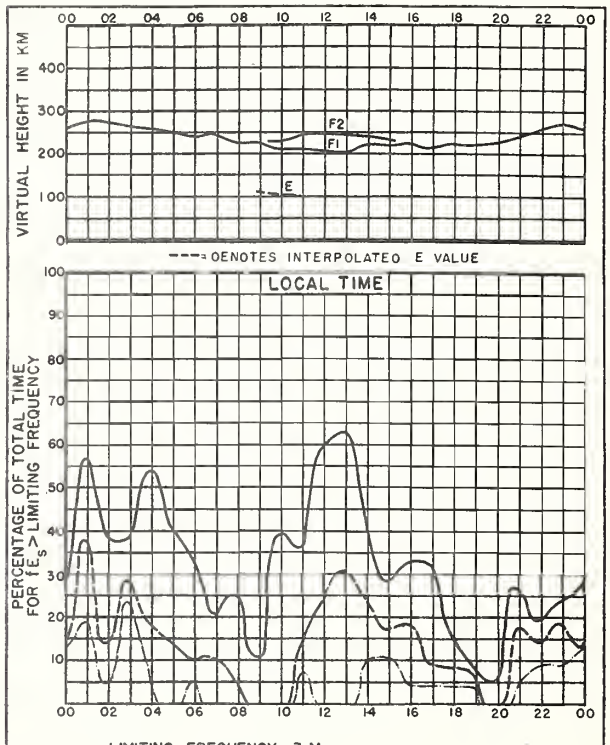

Fig. 47. HOBART, TASMANIA JUNE 1946

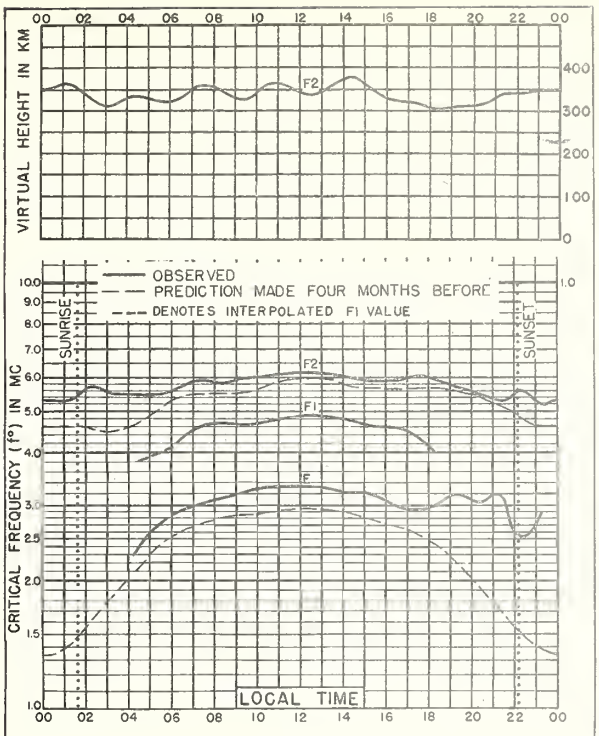

Fig. 48. TROMSO, NORWAY
69.7°N, 18.9°E MAY 1946

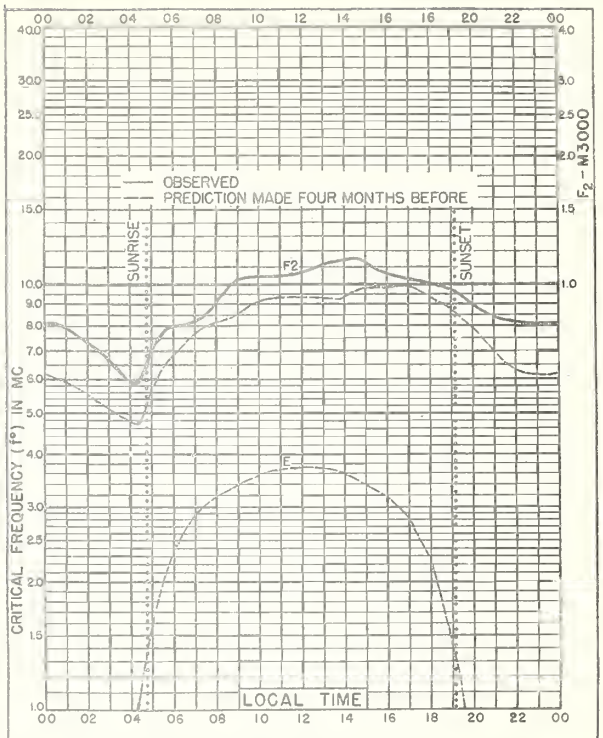

Fig. 49. PEIPING, CHINA
39.9°N, 116.4°E MAY 1946

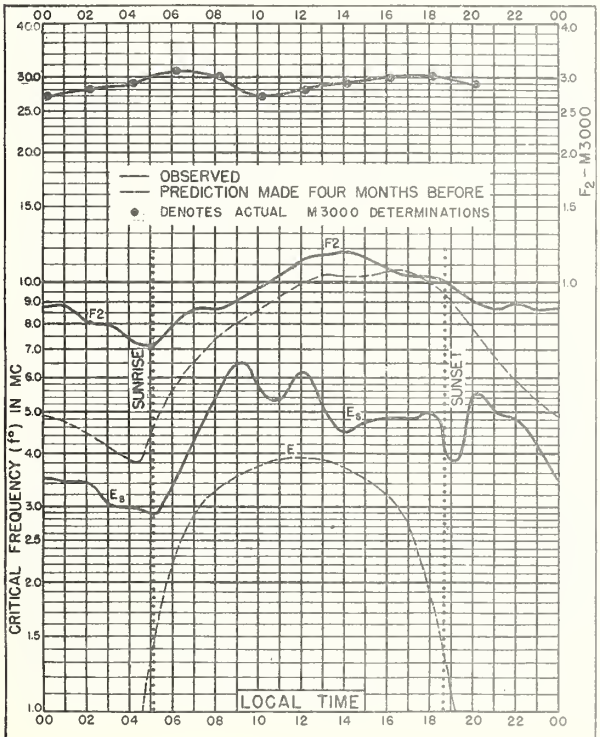

Fig. 50. CAIRO, EGYPT
30.6°N, 31.9°E MAY 1946

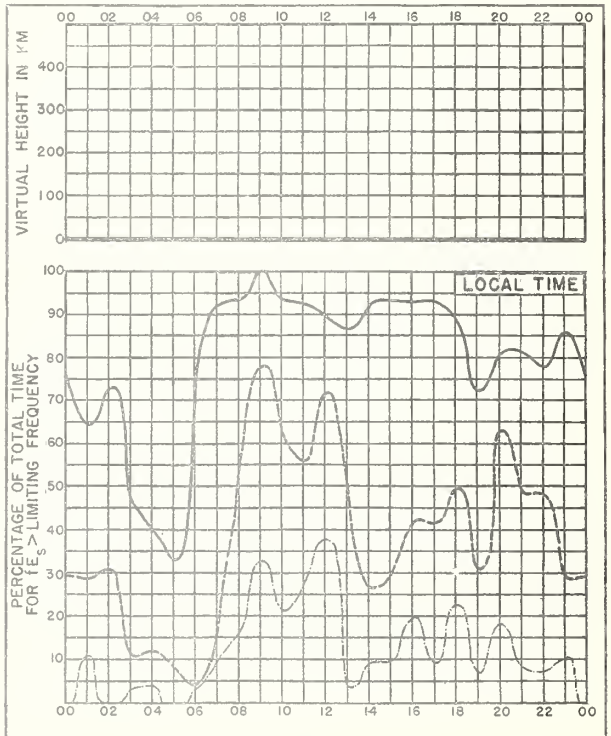

Fig. 51. CAIRO, EGYPT MAY 1946

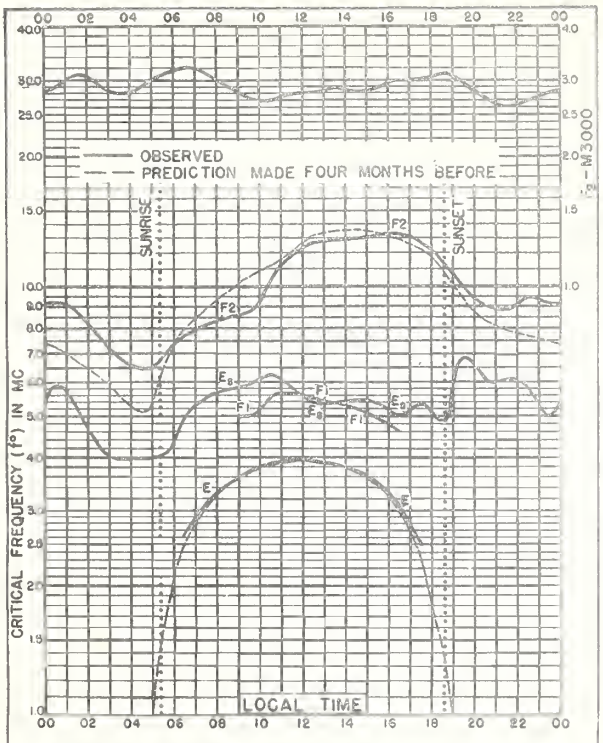

Fig. 52. OKINAWA I.
26.3°N, 127.8°E
MAY 1946

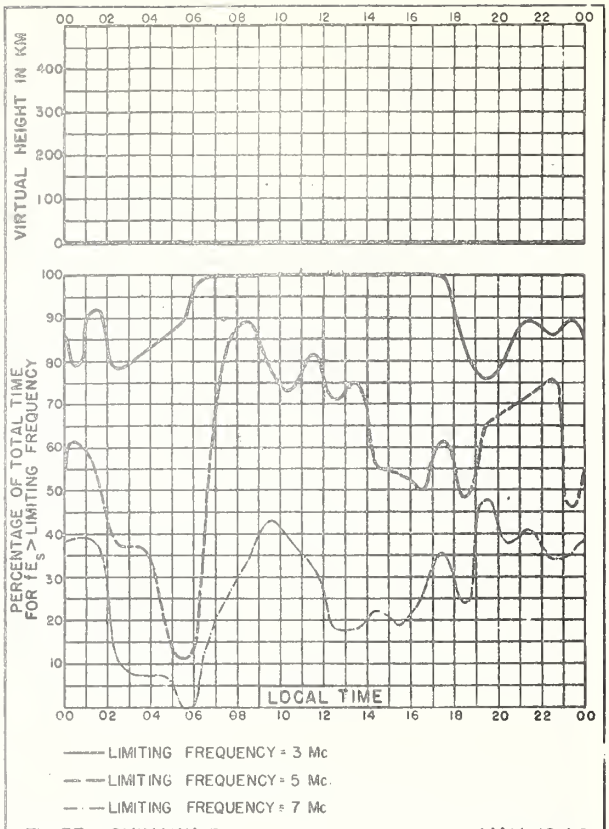

Fig. 53. OKINAWA I.
MAY 1946

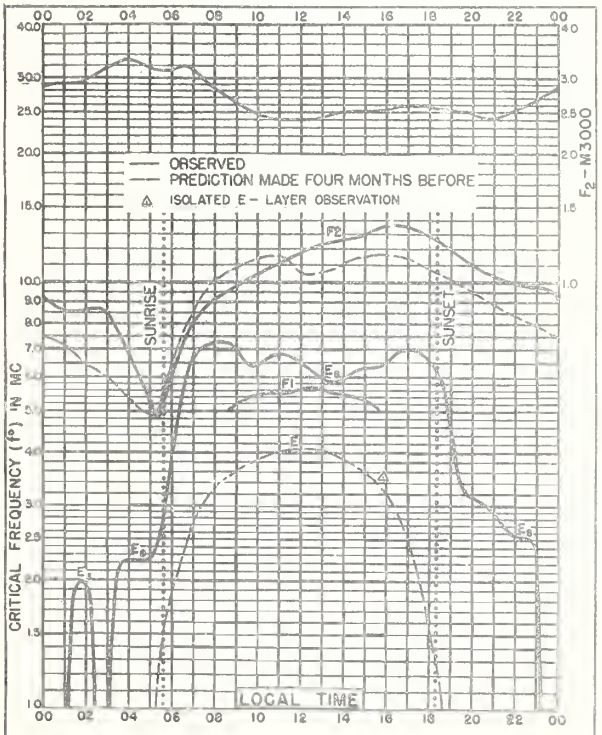

Fig. 54. GUAM I.
13.5°N, 144.8°E
MAY 1946

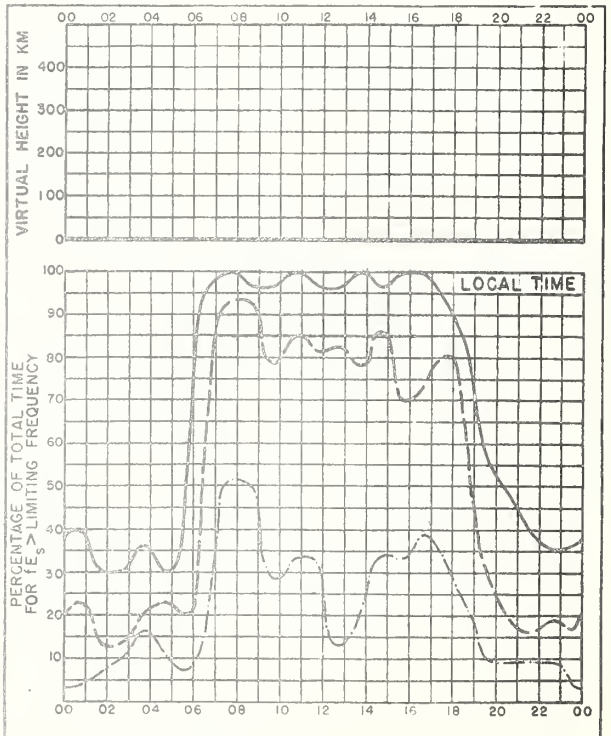

Fig. 55. GUAM I.
MAY 1946

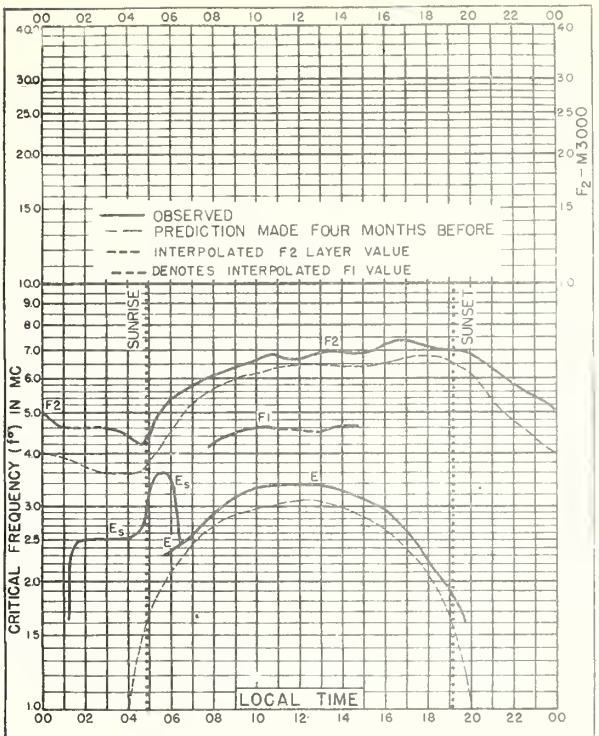

Fig. 56. OSLO, NORWAY
59.9°N, 11.0°E APRIL 1946

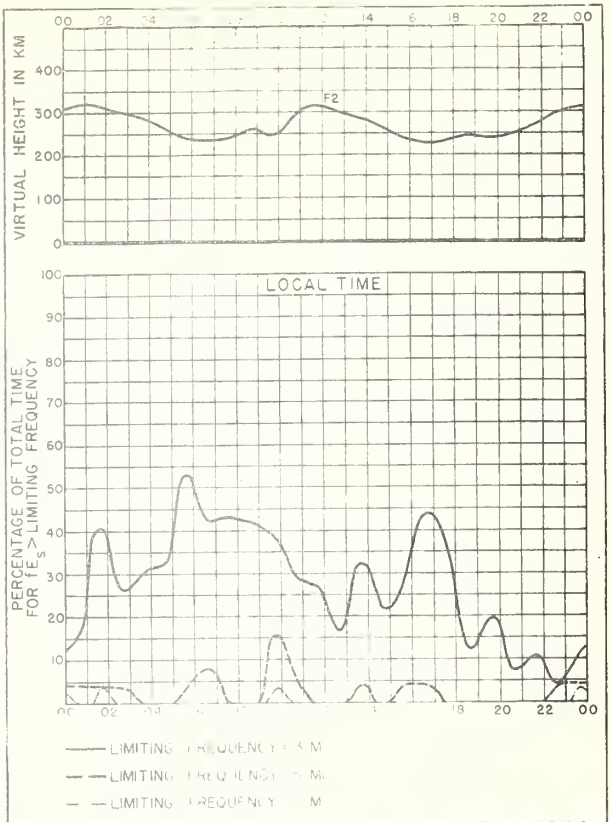

Fig. 57. OSLO, NORWAY APRIL 1946

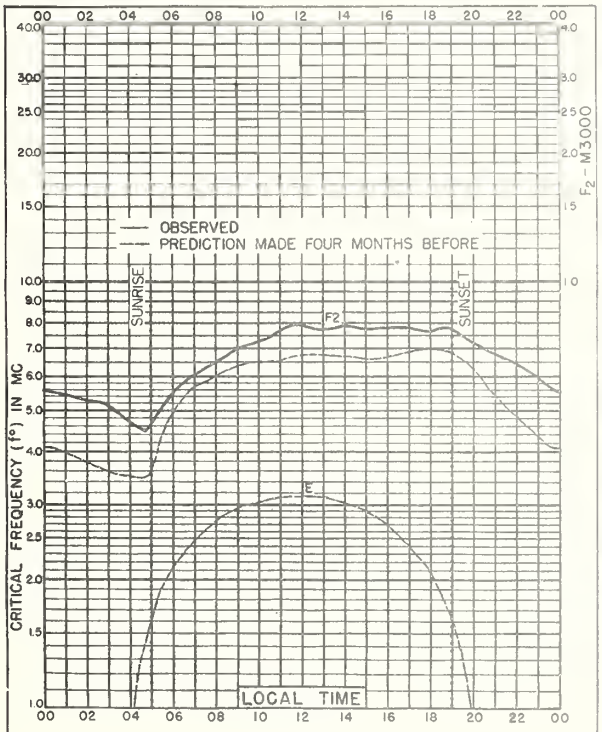

Fig. 58. BURGHEAD, SCOTLAND
57.7°N, 3.5°W APRIL 1946

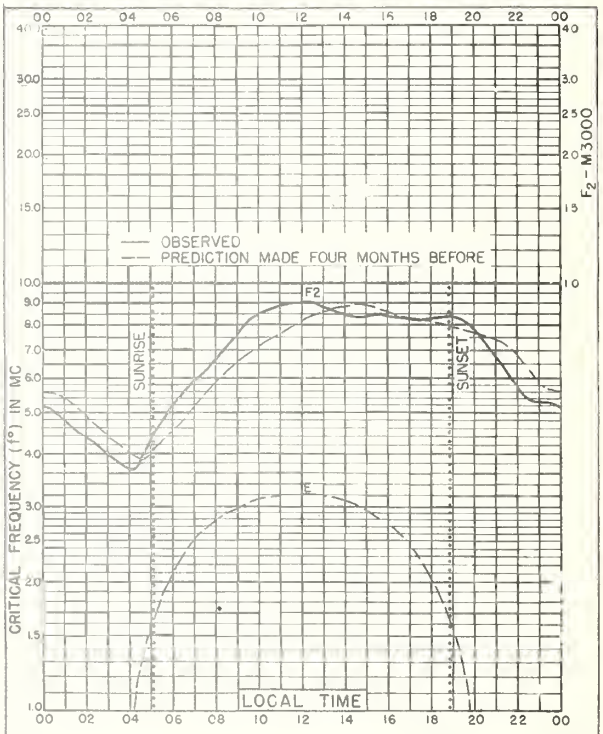

Fig. 59. MOSCOW (KRASNAJA PAKHRA), U.S.S.R.
55.5°N, 37.3°E APRIL 1946

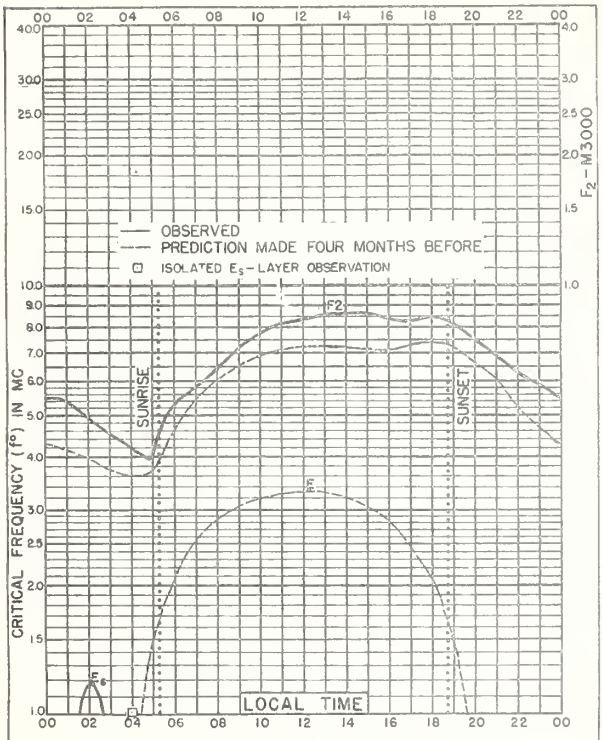

Fig. 60. SLOUGH, ENGLAND
51.5°N, 0.6°W
APRIL 1946

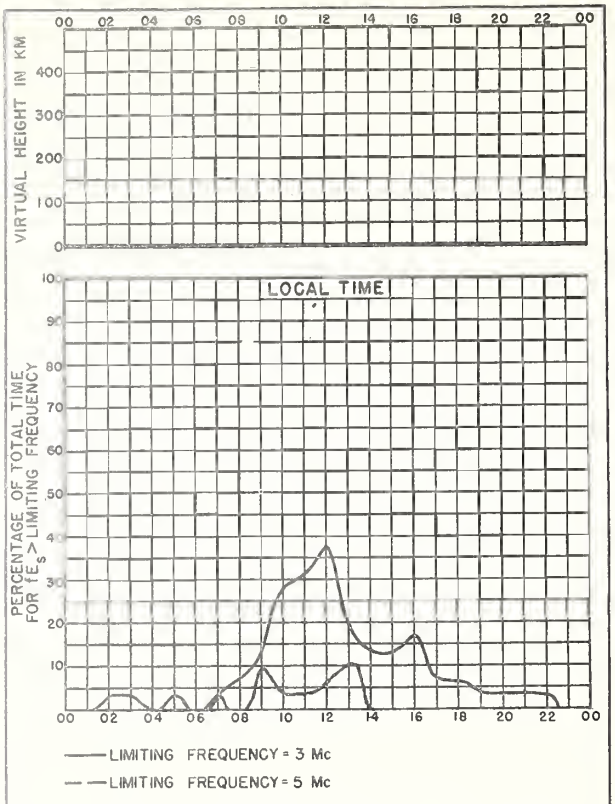

Fig. 61. SLOUGH, ENGLAND
APRIL 1946

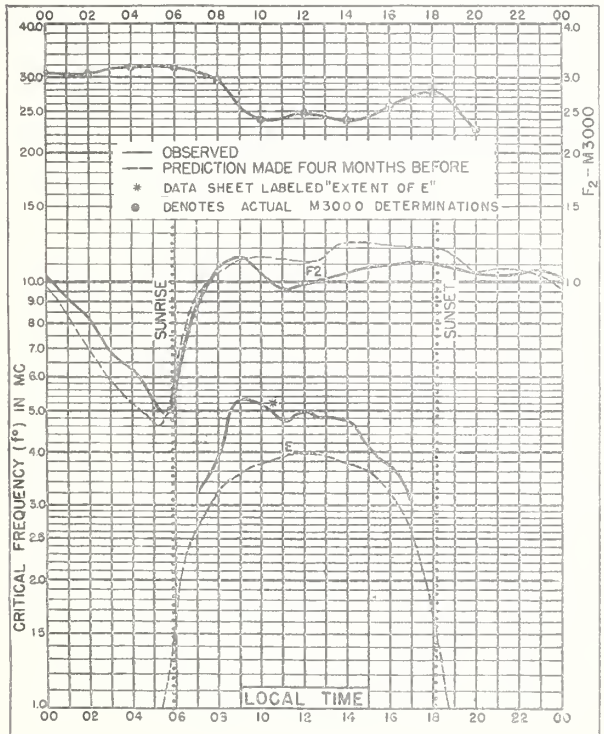

Fig. 62. COLOMBO, CEYLON
6.6°N, 80.0°E
APRIL 1946

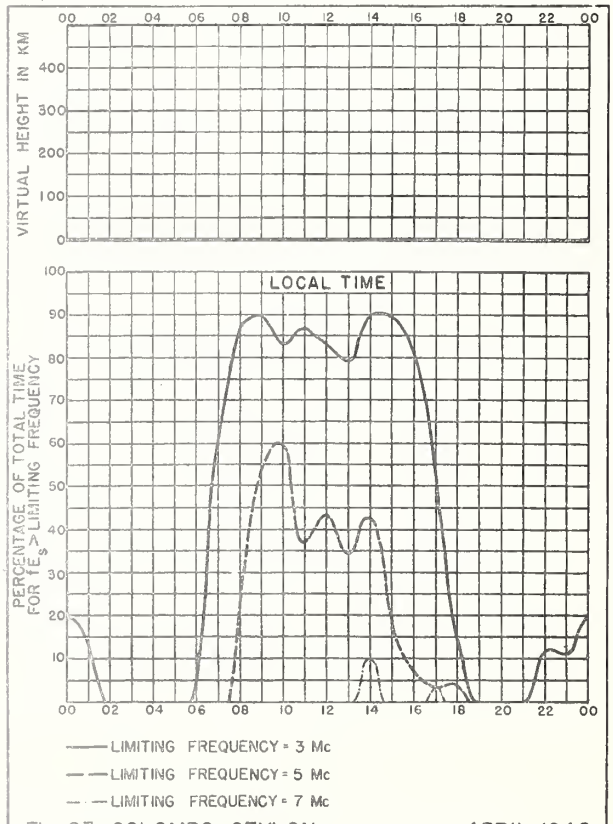

Fig. 63. COLOMBO, CEYLON
APRIL 1946

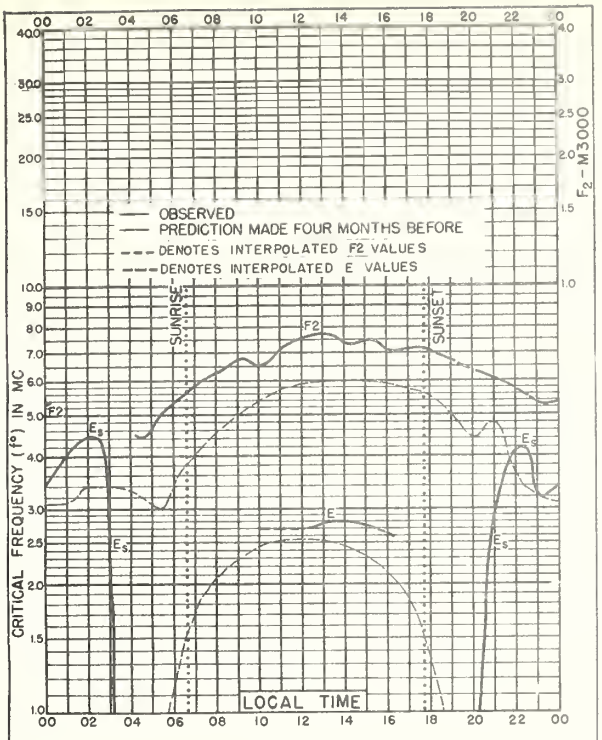

Fig. 64. TROMSO, NORWAY
69.7°N, 18.9°E MARCH 1946

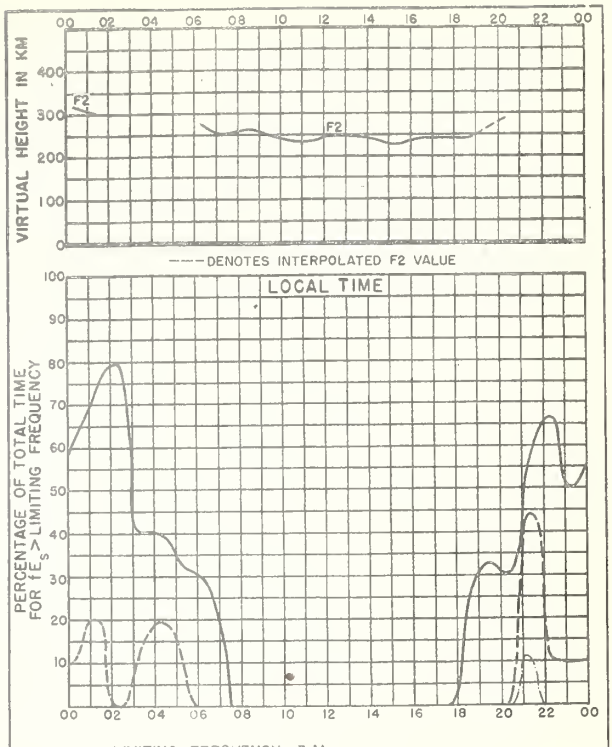

Fig. 65. TROMSO, NORWAY MARCH 1946

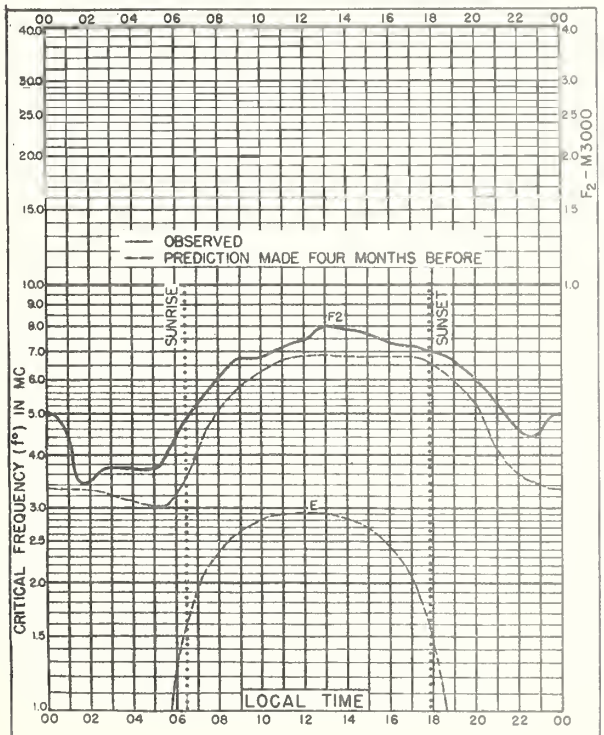

Fig. 66. BURGHEAD, SCOTLAND
57.7°N, 3.5°W MARCH 1946

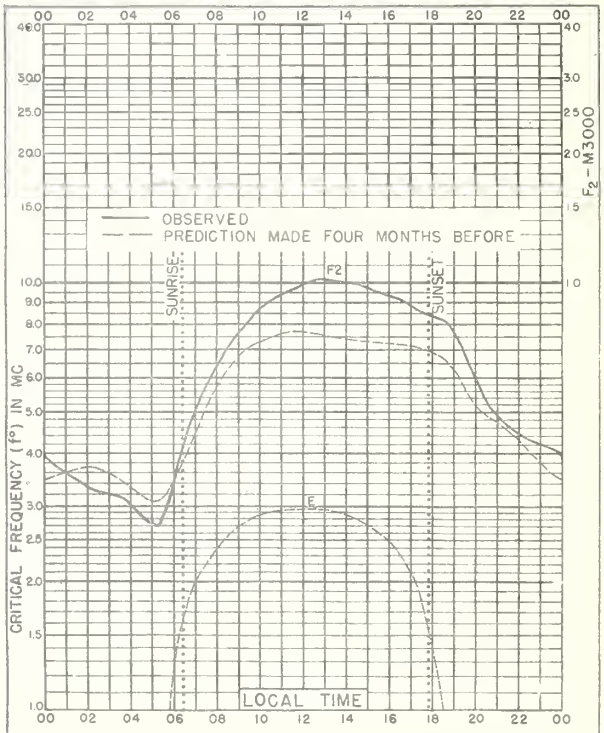

Fig. 67. MOSCOW (KRASNAJA PAKHRA), U.S.S.R.
55.5°N, 37.3°E MARCH 1946

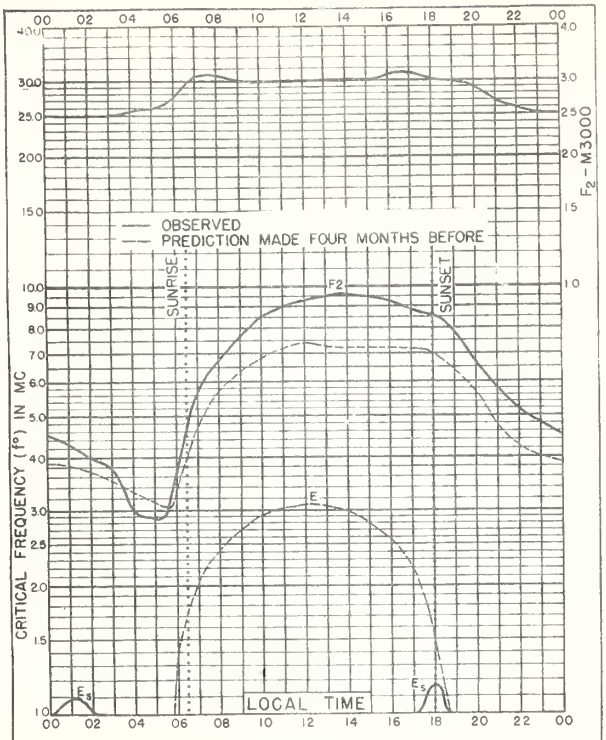

Fig. 68. SLOUGH, ENGLAND
51.5°N, 0.6°W MARCH 1946

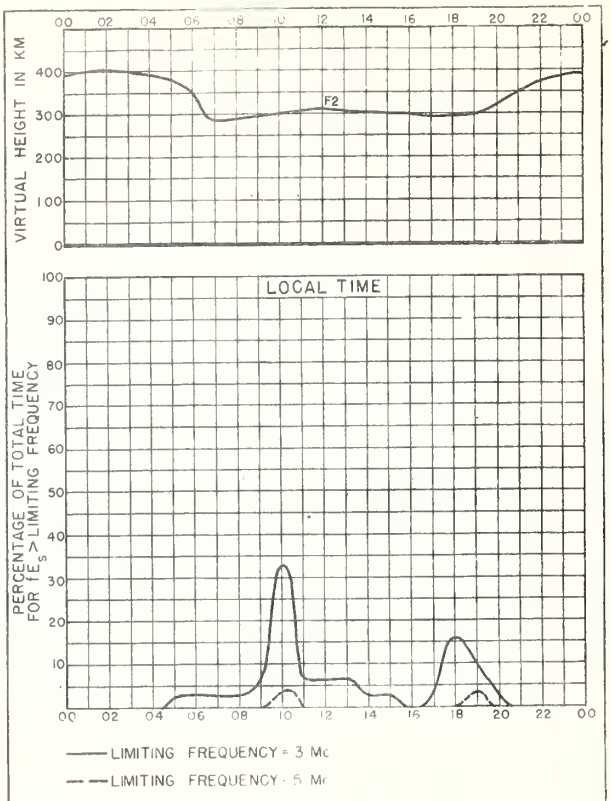

Fig. 69. SLOUGH, ENGLAND MARCH 1946

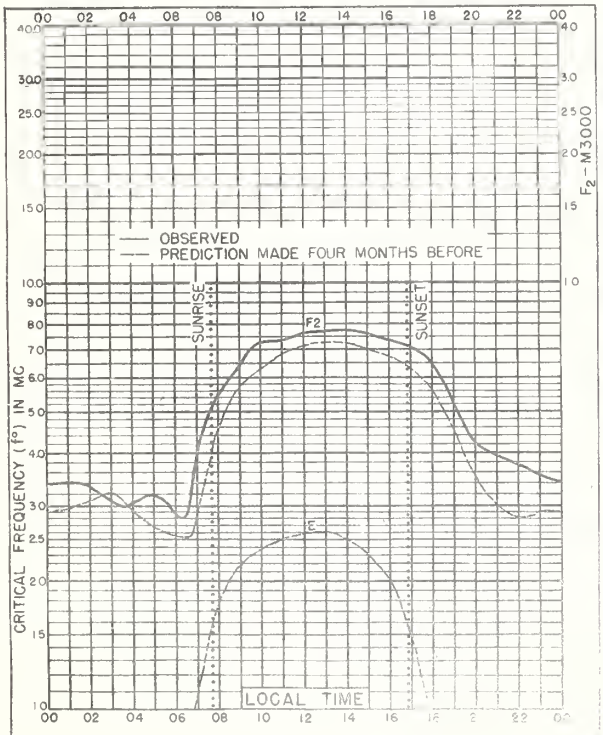

Fig. 70. BURGHEAD, SCOTLAND
57.7°N, 3.5°W FEBRUARY 1946

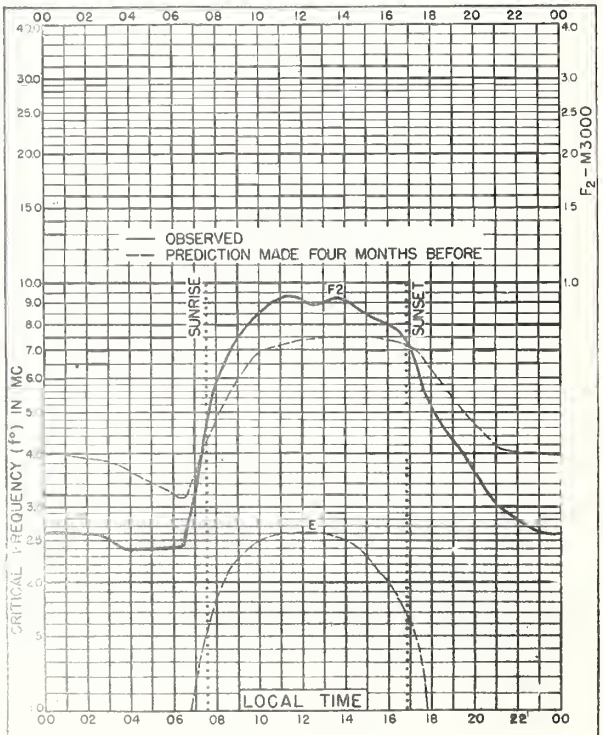

Fig. 71. MOSCOW (KRASNAJA PAKHRA), U.S.S.R.
55.5°N, 37.3°E FEBRUARY 1946

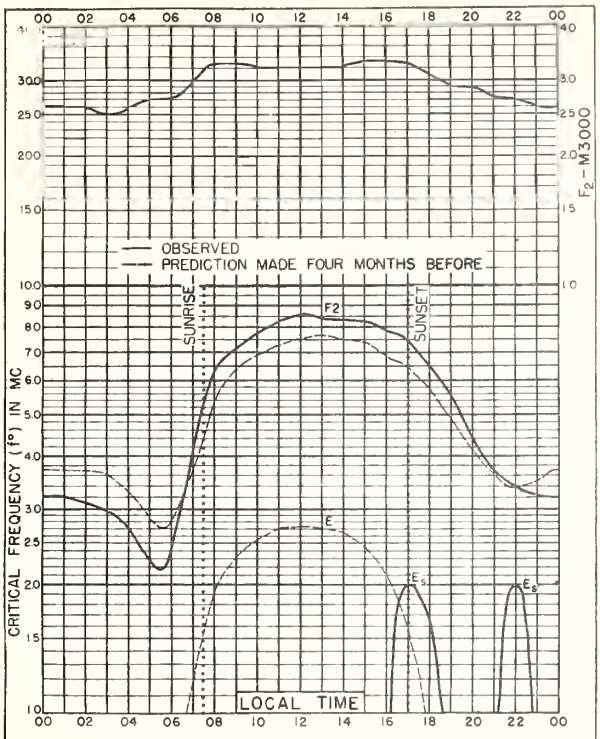

Fig. 72. SLOUGH, ENGLAND
51.5°N, 0.6°W FEBRUARY 1946

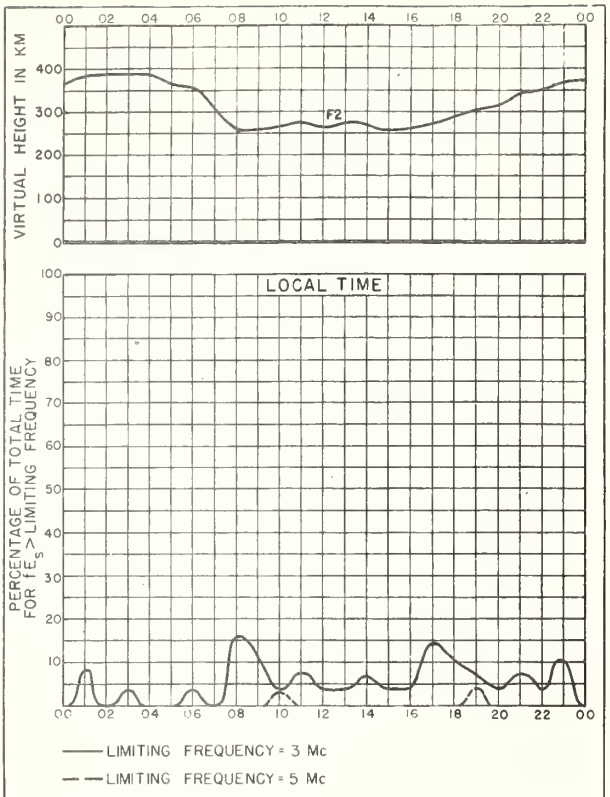

Fig. 73. SLOUGH, ENGLAND FEBRUARY 1946

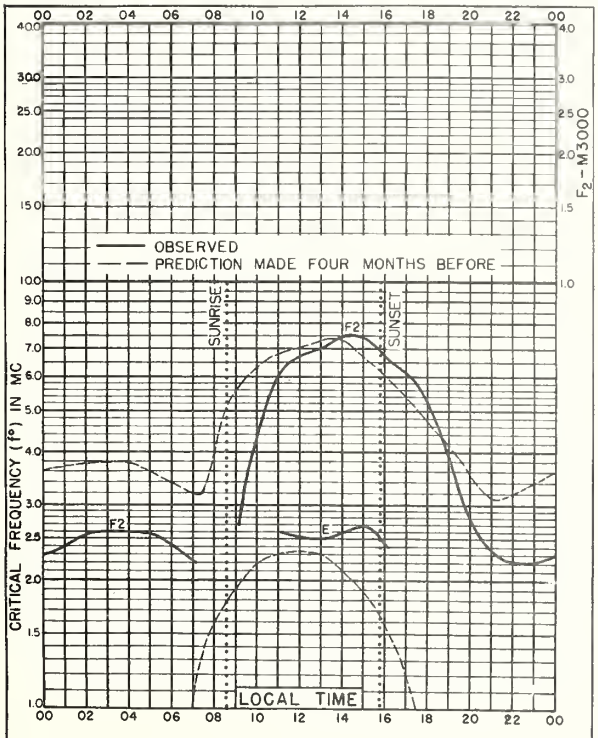

Fig. 74. SVERDLOVSK, U.S.S.R.
56.7°N, 61.1°E JANUARY 1946

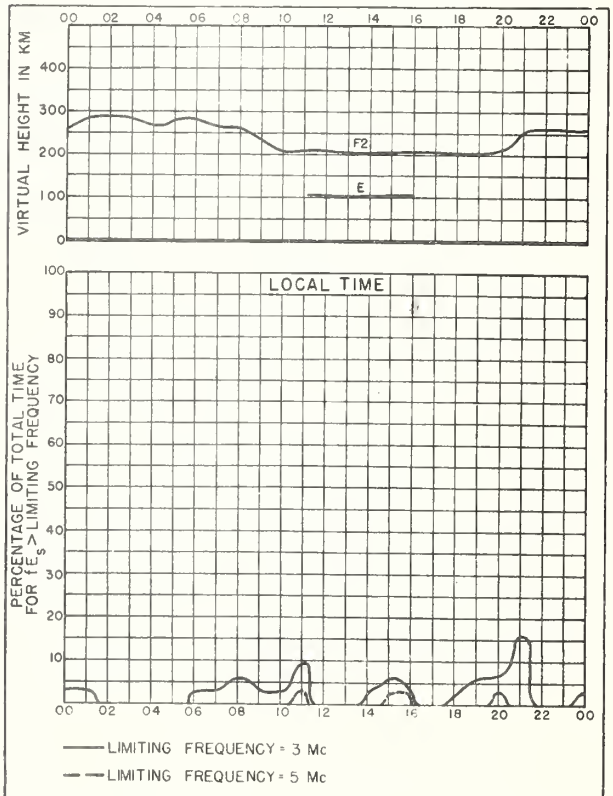

Fig. 75. SVERDLOVSK, U.S.S.R. JANUARY 1946

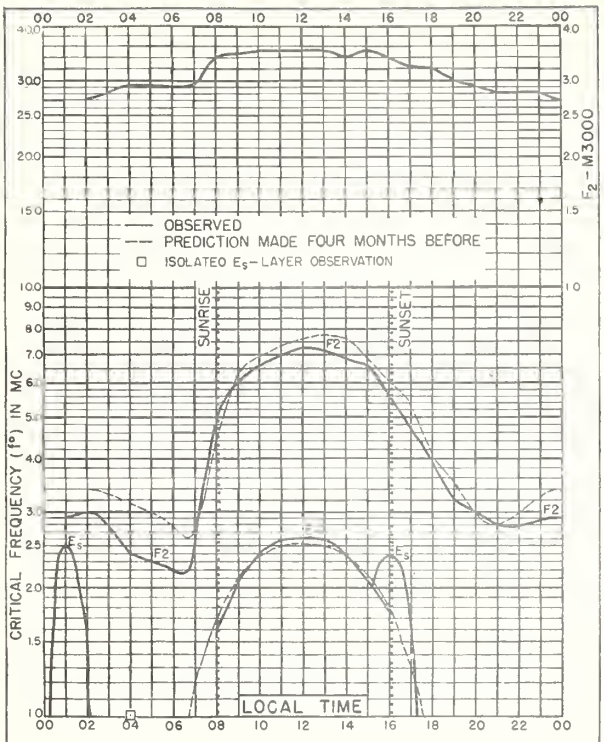

Fig. 76. SLOUGH, ENGLAND
51.5°N, 0.6°W JANUARY 1946

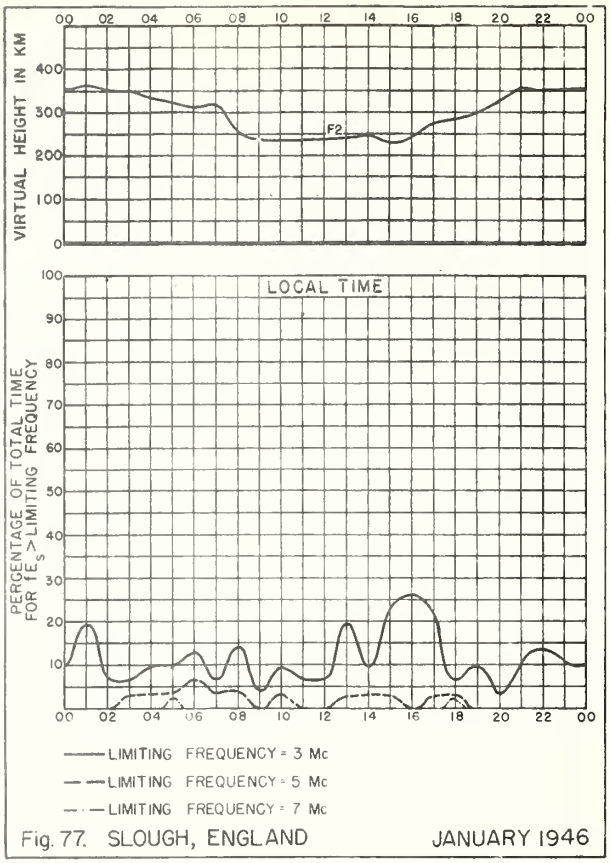

Fig. 77. SLOUGH, ENGLAND JANUARY 1946

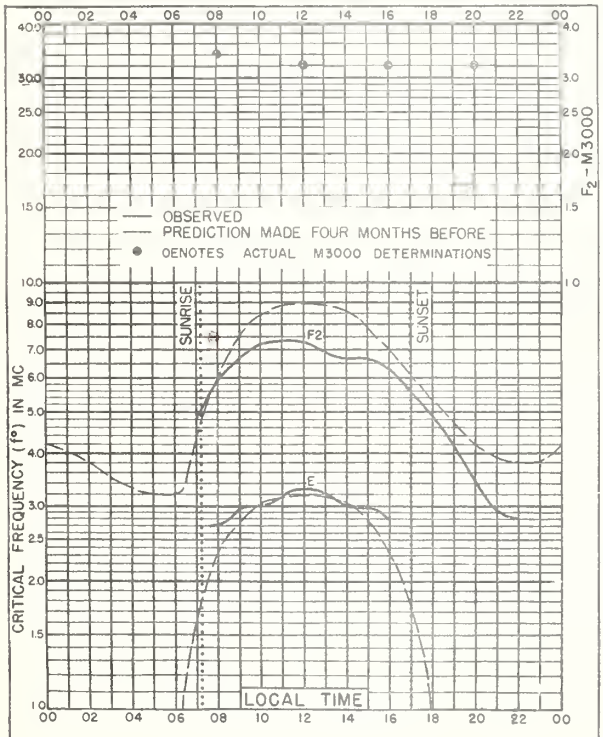

Fig. 78. PESHAWAR, INDIA
34.0°N, 71.5°E JANUARY 1946

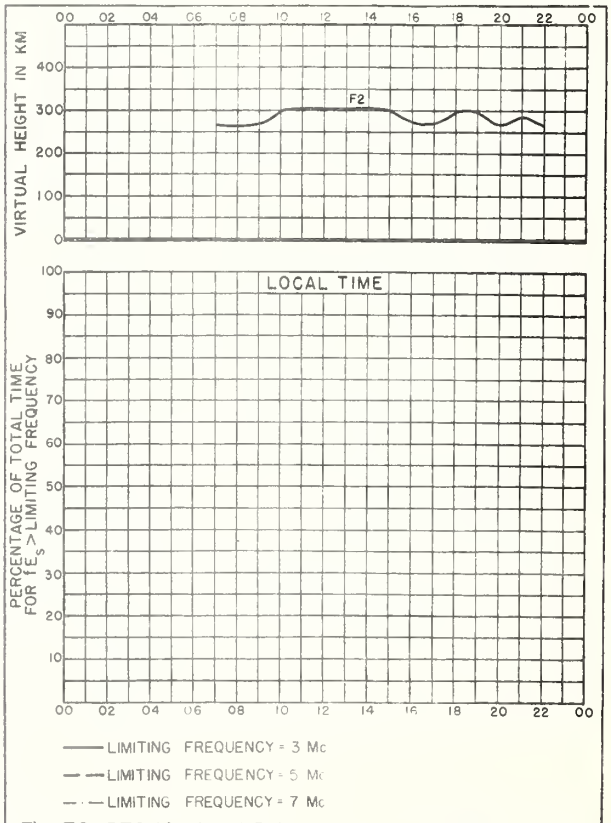

Fig. 79. PESHAWAR, INDIA JANUARY 1946

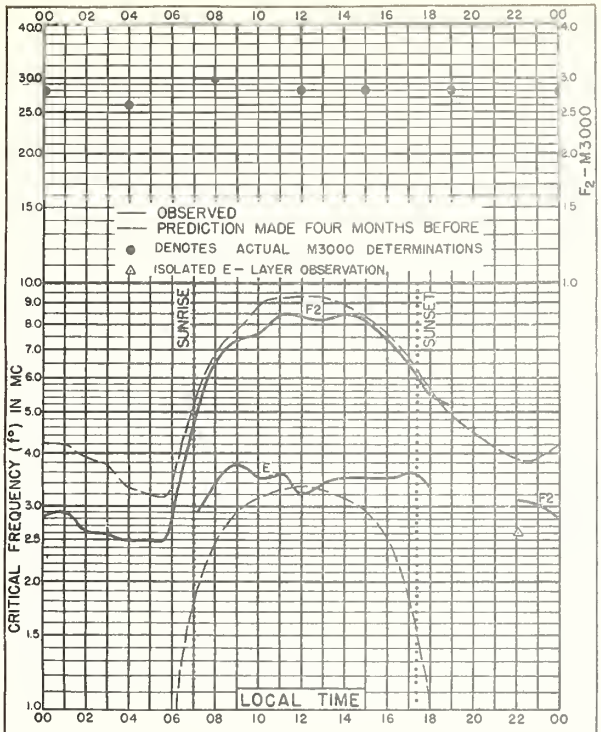

Fig. 80. DELHI, INDIA
28.6°N, 77.1°E JANUARY 1946

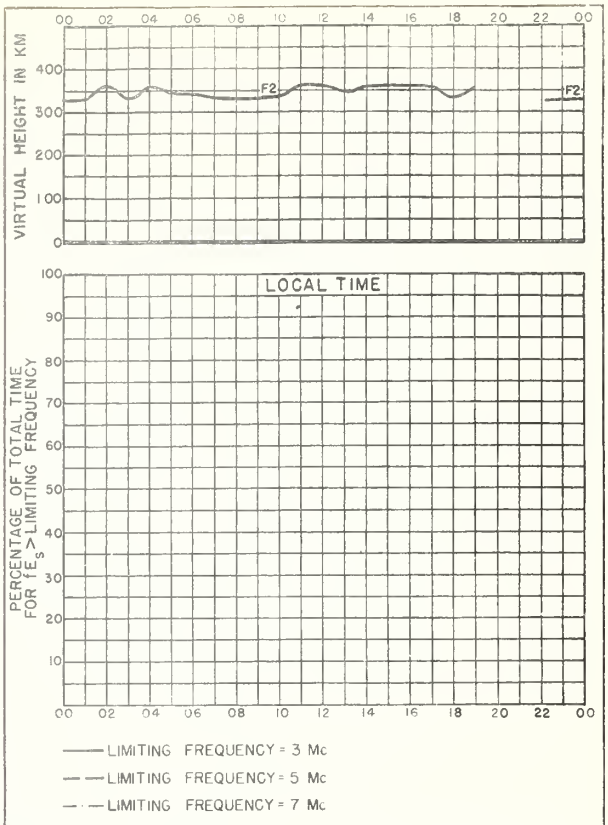

Fig. 81. DELHI, INDIA JANUARY 1946

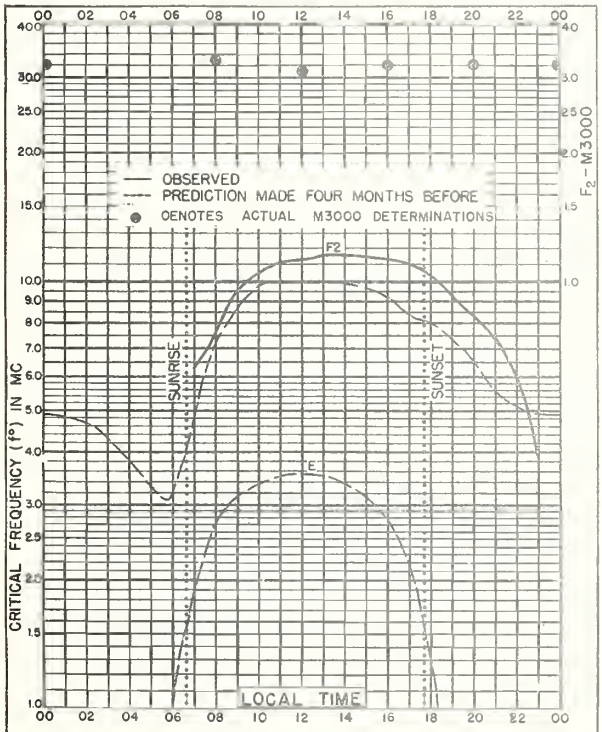

Fig. 82. BOMBAY, INDIA
19.0°N, 73.0°E JANUARY 1946

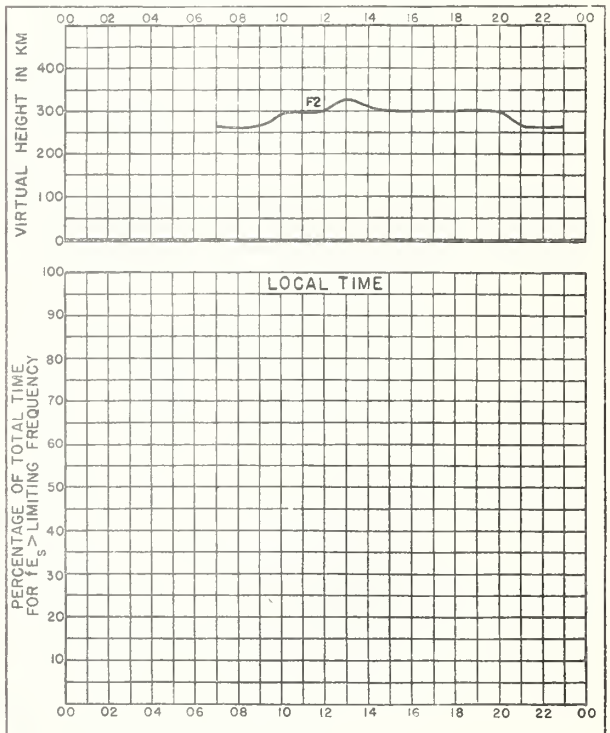

Fig. 83. BOMBAY, INDIA JANUARY 1946

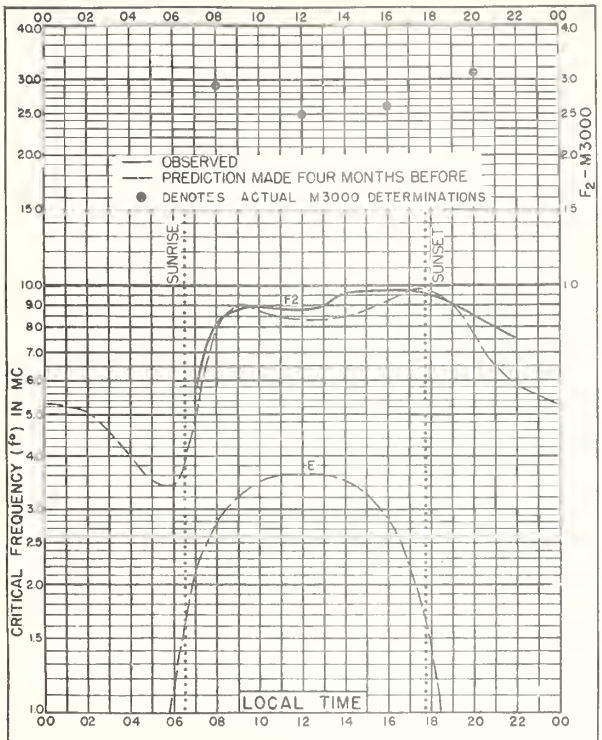

Fig 84. MADRAS, INDIA
13.0°N, 80.2°E JANUARY 1946

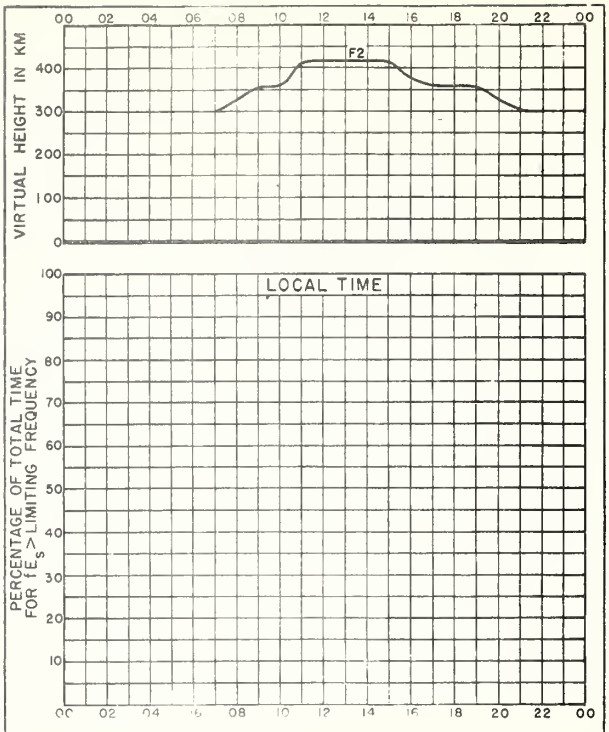

Fig 85. MADRAS, INDIA JANUARY 1946

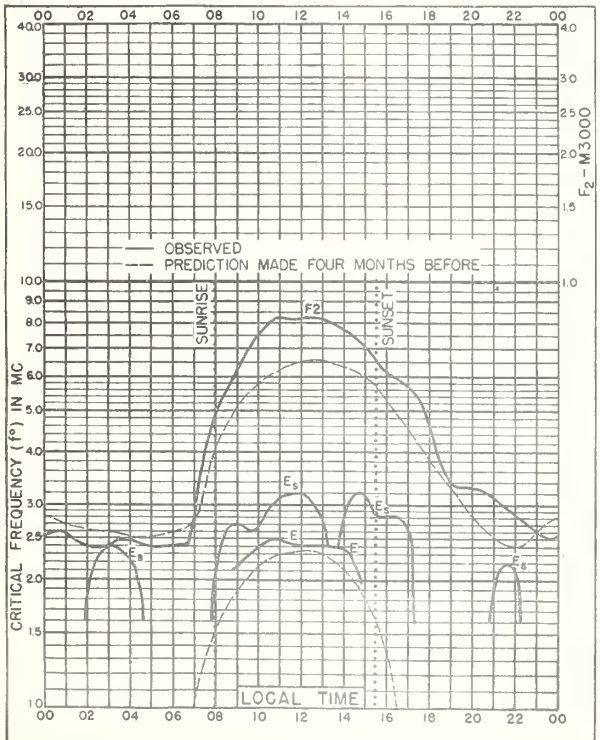

Fig. 86. OSLO, NORWAY
59.9°N, 11.0°E NOVEMBER 1945

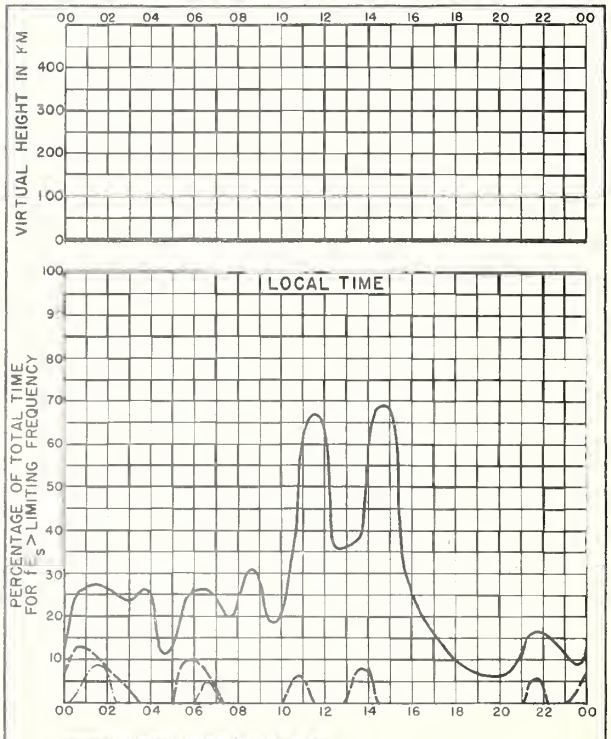

Fig. 87. OSLO, NORWAY NOVEMBER 1945

Daily:
Radio disturbance warnings, every half hour from broadcast station WWV of the National Bureau of Standards.
Telephoned and telegraphed reports of ionospheric, solar, geomagnetic and radio propagation data.

Weekly:
CRPL-J. Radio Propagation Forecast (of days most likely to be disturbed, during following month).

Semimonthly:
CRPL-Je. Semimonthly Frequency Revision Factors for CRPL Basic Radio Propagation Prediction Reports.

Monthly:
CRPL-D. Basic Radio Propagation Predictions--Three months in advance. (War Dept. TB 11-499- , monthly supplements to TM 11-499; Navy Dept. DNC-13-1( ), monthly supplements to DNC-13-1). CRPL-D Series now available from Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C.

CRPL-F. Ionospheric Data.

Bimonthly:
IRPL-G. Correlation of D.F. Errors with Ionospheric Conditions. Final issue G12, for months of May and June, 1946.

Quarterly:
*IRPL-A. Recommended Frequency Bands for Ships and Aircraft in the Atlantic and Pacific.
*IRPL-H. Frequency Guide for Operating Personnel.
Reports on Ionospheric Measurement Standards.
Reports on Microwave Measurement Standards.

Reports Issued in Past:
IRPL Radio Propagation Handbook, Part 1. (War Dept. TM 11-499; Navy Dept. DNC-13-1).
IRPL-C61. Report of the International Radio Propagation Conference, 17 April to 5 May 1944.

IRPL-R. Unscheduled reports:
R1. Maximum Usable Frequency Graph Paper.
R4. Methods Used by IRPL for the Prediction of Ionosphere Characteristics and Maximum Usable Frequencies.
R5. Criteria for Ionospheric Storminess.
R6. Experimental Studies of Ionospheric Propagation As Applied to The Loran System.
R7. Second Report on Experimental Studies of Ionospheric Propagation As Applied to The Loran System.
R8. The Prediction of Usable Frequencies Over a Path of Short or Medium Length, Including the Effects of Es.
R9. An Automatic Instantaneous Indicator of Skip Distance and MUF.
R10. A Proposal for the Use of Rockets for the Study of the Ionosphere.
R11. A Nomographic Method for Both Prediction and Observation Correlation of Ionosphere Characteristics.
R12. Short Time Variations in Ionospheric Characteristics.
R13. Ionospheric and Radio Propagation Disturbances, October 1943 Through February 1945.
R14. A Graphical Method for Calculating Ground Reflection Coefficients.
R15. Predicted Limits for F2-layer Radio Transmission Throughout the Solar Cycle.
R16. Predicted F2-layer Frequencies Throughout the Solar Cycle, for Summer, Winter, and Equinox Season.
R17. Japanese Ionospheric Data - 1943.
R18. Comparison of Geomagnetic Records and North Atlantic Radio Propagation Quality Figures - October 1943 through May 1945.
R19. Nomographic Predictions of F2-layer Frequencies Throughout the Solar Cycle, for June.
R20. Nomographic Predictions of F2-layer Frequencies Throughout the Solar Cycle, for September.
R21. Notes on the Preparation of Skip-Distance and MUF Charts for Use by Direction-Finder Stations. (For distances out to 4000 km.)
R22. Nomographic Predictions of F2-layer Frequencies Throughout the Solar Cycle, for December.
R23. Solar-Cycle Data for Correlation With Radio Propagation Phenomena.
R24. Relations between Band Width, Pulse Shape and Usefulness of Pulses in The Loran System.
R25. The Prediction of Solar Activity as a Basis for Predictions of Radio Propagation Phenomena.
R26. The Ionosphere as a Measure of Solar Activity.
R27. Relationships Between Radio Propagation Disturbance and Central Meridian Passage of Sunspots Grouped by Distance From Center of Disc.
R28. Nomographic Predictions of F2-Layer Frequencies Throughout the Solar Cycle for January.
R29. Revised Classification of Radio Subjects Used in National Bureau of Standards (N.B.S. Letter Circular LC-514 superseding circular C385).
R30. Disturbance Rating in Values of IRPL Quality - Figure Scale From A. T. & T. Co. Transmission Disturbance Reports to Replace T.D. Figures as Reported.
R31. North Atlantic Radio Propagation Disturbances, October 1943 through October 1945.
R32. Nomographic Predictions of F2-Layer Frequencies Throughout the Solar Cycle, for February.
R33. Ionospheric Data on File at IRPL.
R34. The Interpretation of Recorded Values of fEs.
R35. Comparison of Percentage of Total Time of Occurrence of Second-Multiple Es Reflections and That of fEs in Excess of 3 Mc.

IRPL-T. Reports on Tropospheric Propagation.
T1. Radar Operation and Weather. (Superseded by JANP 101.)
T2. Radar Coverage and Weather. (Superseded by JANP 102.)

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